



REPORT

ON THE

State of Public Health

IN THE CITY OF DUBLIN
FOR THE TWO YEARS
ENDING 31st DECEMBER, 1940

BY

MATTHEW J. RUSSELL, F.R.C.S., D.P.H.

Medical Officer of Health, Dublin.

Port Medical Officer of Health, Dublin.

Examiner, D.P.H., University College, Dublin.

DUBLIN :

PRINTED BY SEALY, BRYERS & WALKER.

1941



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Municipal Buildings.

Dublin, November, 1941.

P. J. Hernon, Esq., B.Comm.,
City Manager and Town Clerk,
City Hall,
DUBLIN.

DEAR CITY MANAGER AND TOWN CLERK,

I beg to submit my Annual Report in relation to the health of the City of Dublin during the years 1939-40.

By way of introduction to the separate sections of the report which deal in turn with the diverse activities of the several Services of the Public Health Department I wish to give you a preintimation of the more important facts it presents.

The death-rate for 1939 was 13·3, while that for *Statistics* 1940 was 14·5. These figures compare with a rate of 13·3 per 1,000 in 1938. The number of deaths from the Principal Epidemic Diseases was 382 (1939) and 365 (1940) giving a death-rate per 1,000 of the population ·81 and ·71 respectively. The death-rate for 1938 was 0·8. There was a decrease in the Infant Mortality Rate for 1939 (90) over that for 1938 (98 per 1,000 births). The figure for 1940 was 92.

During the period there was no major epidemic. *Infectious Diseases.* A progressive decrease in the number of cases of Diphtheria can be reported: 913 (in 1939) and 720 (in 1940). There is a reduction in the deaths of 8 for 1939 and 36 for 1940 on the deaths registered in 1938.

The Corporation has made available to the public for some years past, an immunisation scheme calculated to bring this epidemic disease under control and indeed, if fully availed of, to practically eliminate the

disease. This has not been the result so far, in spite of the most intensive efforts on the part of the Medical Officers engaged to disburse free treatment. The reason for this partial failure lies entirely with the public—a considerable section of parents refusing to voluntarily present their children at the clinic for the requisite preventive inoculation. Immunisation is particularly desirable in the case of children under 5 years of age. Up to this age, as may be noted from Table 22 (page 39), the fatality rate from the disease is very high. As I have pointed out on previous occasions, the success of this treatment is considerably influenced by a continued high percentage of immunisation amongst pre-school children. In addition to the greater fatality amongst them at this age, the children when they enter school later are exposed to the further risk of infection from the high carrier rate which is known to exist in schools, many of which are overcrowded.

In this connection the Dispensary Doctors in the City are in a particularly favourable position, in their relations with mothers and guardians of young children for giving advice and using their undoubted influence with a view to securing protection against this very serious disease. It is sincerely hoped that in the very near future they will find themselves in a position to give complete and enthusiastic co-operation in this very important work.

Tuberculosis

Tuberculosis may occur in the human in early infancy or in extreme old age. It must be remembered that there is a distinct difference between infection and clinically active tuberculous disease. The former usually occurs early in life and in some instances rapidly establishes a condition of declared disease; in pulmonary tuberculosis the brunt of disease incidence is borne by youth and middle age. Thus the avoidance of exposure to infection or the immediate combating in early life and thereafter, would auto-

matically furnish a relatively tubercle free population such as has been achieved in some parts of the world.

This ideal is not to be arrived at in the present state of our knowledge by the administration of any single specific remedy—for there is none such. But it is known that by the application of the general principle of personal and environmental hygiene considerable success may be expected even in one generation towards the elimination of this scourge. In this connexion too great stress could not be laid on the improvement of the sanitary environment and the removal of social conditions—particularly poverty with its impairing effect on the general health. More immediate steps are the securing of adequate notification of cases, thorough examination of all persons who had been in close and constant contact with such cases, segregation of the declared cases in suitable institutions, requisite after-care for arrested cases, and suitable housing of affected families. It can be stated with confidence that a well fed and properly housed population group will show a lower incidence of tuberculosis than the average. In fact in the City of Dublin the effects of increased wages in latter years and the gradual improvement in the housing conditions of the working classes is clearly reflected in the downward trend of this disease.

Further reference will be made to the scheme in operation for the control of tuberculosis in Dublin in the body of the report.

The important part played by the Dispensaries and the improved modern treatment given at the Sanatoria are dealt with in the appropriate sections of the report by the respective Medical Officers in charge. *Dispensaries and Sanatoria.*

The progressive policy of slum clearance and abatement of overcrowding has been continued during the years by the Corporation and City Manager. It is very *Housing.*

satisfactory to think that now there is full realisation on the part of the ratepayers and taxpayers of the urgent necessity for clearing out insanitary houses in the city.

*Food
Inspection.*

The duties in connection with the supervision of food supplies imposed by various Acts and Orders are carried out by a fully qualified staff of Veterinary Inspectors. They entail the examination of the carcasses of animals slaughtered for food at the abattoir and private slaughter-houses ; the inspection of meat, fish and fruit at the various wholesale and retail markets and stores ; and the inspection of shops, factories, etc., where foodstuffs are sold, prepared or stored for human food.

A full report is given by the Chief Veterinary Officer under this Section.

*Maternity and
Child Welfare
Service, and
School Medical
Service.*

The Corporation's activities in the operation of these schemes are fully dealt with by the respective Medical Officers in charge of these services.

In this connection I have pleasure in referring to the invaluable aid which is rendered yearly by a large number of voluntary workers who devote considerable time and energy in connection with the Maternity and Child Welfare Branch.

M. J. RUSSELL,

Medical Officer of Health.

CITY OF DUBLIN.

VITAL STATISTICS.

Area of City	...	...	18,781 acres.	
			1939.	1940.
Population (per Registrar-General)			482,300	487,500
Population Density	...	...	25·4	25·9
Births	...	...	11,558	11,276
Birth Rate	...	...	24·0	23·1
Deaths	...	...	6,403	7,065
Death Rate	...	...	13·3	14·5
Death Rate from Principal Epidemic Diseases	...	...	0·8	0·7
Death Rate from Tuberculosis (all forms)	...	...	1·50	1·60
Death Rate from Tuberculosis (Pulmonary)	...	...	1·2	1·3
Deaths of Children under 1 year	...		1,036	1,039
Infant Mortality Rate	...		90	92
			per 1,000 Births.	

POPULATION.

The estimated population of the City of Dublin at the mid-point in the year 1939 was 482,300. In 1940 the population was estimated at 487,500.

EXCESS OF BIRTHS OVER DEATHS.

The excess of births over deaths or what is generally spoken of as the “ natural increase of the population ” was 5,155 in 1939 and 4,211 in 1940. The corresponding figures in the preceding 2 years were 5,278 in 1938 and 4,629 in 1937.

Various rates (birth-rates, death-rates, etc.) referred to in this report are calculated upon the estimated populations.

The density of the population at the present time is 25·9 persons per acre, compared with 40·4 in 1929. This fall in the population density is to be attributed to the extension of the City area in 1930, but since the annexed population was mainly urban in character, the improvement in this figure is more apparent than real. For instance, the populations of Rathmines and Rathgar and the township of Pembroke, amounting to approximately three-fourths of the annexed population, were shown by the Census of 1926 to have 16·1 and 26·5 per cent. respectively living in numbers more than 2 persons per room, as enumerated amongst private families in these areas.

BIRTHS.

The number of births registered in the City of Dublin during 1939 was 11,558 and 1940 11,276 ; a further 2,230 for 1939 and 2,165 for 1940 occurring in Institu-

tions in the City, but relating to other localities were excluded in arriving at this figure. The figures represent a rate of 24·0 and 23·1 per 1,000 of the population, respectively, as compared with 24·4 in 1938.

The Notification of Births Acts 1907 and 1915, provide for the notification to the Medical Officer of Health of every birth, including stillbirths, within 36 hours of its occurrence.

In accordance with the Notification of Births Acts 1907 and 1915—some 13,811 births were notified in 1939 and 14,222 in 1940. Of these, 1,224 (595 in 1939 and 629 in 1940) were notified as stillbirths. 664 of whom were males and 560 were females. Notifications originated as follows :

	1939	1940	Total
Maternity Institutions	10,544	10,369	20,913
Midwives	3,267	3,853	7,120
Other Persons ...	—	—	—
	13,811	14,222	28,033

Of the total births notified during the period under review, 4,912 (2,365 in 1939 and 2,547 in 1940) were births whose parents ordinarily resided outside the City.

The following table shows the births and birth-rates during the decennial period, 1931–40.

TABLE 1.

BIRTHS AND BIRTH RATES, 1931—40.

Year.			Births.	Rate per 1,000 of the Population.
1931	...	...	10,425	25·3
1932	...	...	10,503	25·3
1933	...	...	10,693	25·5
1934	...	...	11,140	26·3
1935	...	...	11,451	26·7
1936	...	...	11,582	24·5
1937	...	...	11,652	24·7
1938	...	...	11,633	24·4
1939	...	...	11,558	24·0
1940	...	...	11,276	23·1

DEATHS.

The number of deaths recorded during 1939 was 6,403, equivalent to a rate of 13·3 per 1,000 of the population. The corresponding figures for 1940 were 7,065 and 14·5, respectively. These rates compare favourably with 13·3 recorded for 1938. The standardized rate is based on the age and sex constitution of Saorstát Éireann as a whole at the Census of 1936. The effect of standardization in recent years has been to raise the death-rate per 1,000 living in Dublin by 2 or 3 points.

CAUSES OF DEATH.

TABLE 2.

TABLE SHOWING THE NUMBER OF DEATHS FROM ALL CAUSES AND FROM SOME OF THE PRINCIPAL CAUSES RECORDED FOR THE CITY OF DUBLIN DURING THE YEARS 1939 AND 1940, THE FORMER BY QUARTERS, WITH THE MORTALITY PER 1,000 OF THE ESTIMATED POPULATION FOR EACH OF THESE YEARS.

CAUSE OF DEATH	NUMBER OF DEATHS						DEATH RATES PER 1,000 OF POPULATION	
	1939					Year 1940	1939	1940
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total			
PRINCIPAL EPIDEMIC DISEASES								
Enteric Fever	1	2	1	3	7	3	0·1	0·1
Typhus	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—
Measles	10	34	7	—	51	23	·11	·04
Scarlet Fever	3	2	—	—	5	7	·01	·01
Whooping Cough	13	8	3	2	26	43	·07	·07
Diphtheria	29	18	11	26	84	56	·18	·11
Diarrhoeal Diseases	40	35	86	48	209	233	·43	·47
TOTAL	96	99	108	79	382	365	·81	0·71
TUBERCULOUS DISEASES.								
Pulmonary Tuberculosis	145	157	141	125	568	636	1·20	1·3
Other Forms	46	41	22	39	148	153	·3	·3
DISEASES OF RESPIRATORY SYSTEM.								
Pneumonia	183	104	58	86	431	457	·90	·95
Others	256	103	78	128	565	689	1·17	1·3
DEATHS FROM OTHER CAUSES.								
Influenza	25	4	1	6	36	96	·07	0·2
Cancer	148	152	139	146	585	584	1·21	1·21
Puerperal Sepsis	2	1	3	—	6	1	·01	—
Other Puerperal Conditions	3	5	4	5	17	15	·05	·03
Violence	45	38	42	38	163	189	·34	·38
Other Causes	1,041	833	743	885	3,502	3,880	7·26	7·97
DEATHS FROM ALL CAUSES	1,990	1,537	1,339	1,537	6,403	7,065	13·3	14·35
DEATH-RATE PER 1,000 OF THE POPULATION	16·5	12·7	11·1	12·7	13·3	—	—	—
INFANT MORTALITY (deaths under 1 year per 1,000 births)	105	77	77	101	90	92	—	—

PRINCIPAL EPIDEMIC DISEASES.

Inspection of Table 2 which sets out deaths from several causes will show that there were 382 deaths from these epidemic diseases in 1939, or 5·9 per cent.

of the total deaths. For 1940 the figure was 365 or 5·2 per cent. of the total deaths. The corresponding figures for 1938 were 400 and 6·3 per cent. The rates per 1,000 of the population for the two years were ·81 in 1939 and ·71 in 1940, as compared with ·85 in 1939. This is a satisfactory reduction to be able to record since it represents a decrease in practically all the epidemic diseases. The death rate from “principal epidemic diseases” is one of the rates customarily used in assessing the state of public health in a given population group and any notable decline in this rate is a satisfactory index.

DEATHS FROM ALL CAUSES AND DEATH-RATES
PER 1,000 LIVING, 1931—40.

Year.			Deaths from all Causes.	Death-rate per 1,000 Living.
1931	...	...	6,562	15·9
1932	...	...	6,536	15·6
1933	...	...	6,405	15·3
1934	...	...	5,748	13·6
1935	...	...	6,506	15·3
1936	...	...	6,996	15·0
1937	...	...	7,023	14·9
1938	...	...	6,355	13·3
1939	...	...	6,403	13·3
1940	...	...	7,065	14·5

TABLE 4.

SHOWING THE NUMBER OF DEATHS AND THE DEATH RATES IN
EACH QUARTER FOR THE YEARS 1935-1940.

Year	Deaths	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total
1935	Number ...	1,933	1,628	1,336	1,609	6,506
	Rate per 1,000	18·0	15·2	12·5	15·0	15·2
1936	Number ...	2,048	1,669	1,442	1,837	6,996
	Rate per 1,000	18·9	14·3	12·3	15·7	15·0
1937	Number ...	2,503	1,624	1,347	1,549	7,023
	Rate per 1,000	21·2	13·8	11·4	13·1	14·9
1938	Number ...	1,912	1,486	1,321	1,636	6,355
	Rate per 1,000	16·0	12·5	11·1	13·7	13·3
1939	Number ...	1,990	1,537	1,339	1,537	6,403
	Rate per 1,000	16·5	12·7	11·1	12·7	13·3
1940	Number ...	2,623	1,599	1,334	1,509	7,065
	Rate per 1,000	21·5	13·1	11·0	13·4	14·5

INFANT MORTALITY.

In 1939 the number of deaths of infants under one year of age was 1,036 or 16 per cent. of the total deaths registered. The figures for 1940 were 1,039 or 14·7. The rates per 1,000 births for each of the years were 90 and 92, respectively. The rate for 1938 was 98. Of the total deaths for 1940, 43·21 per cent. were of children under 1 month; 14·44 per cent. between 1 month and 2 months; 11·07 per cent. between 2 months and 3 months; 17·13 per cent. between three months and six months, and 14·15 per cent. from 6 months to 1 year.

The Infant Mortality rates since 1931 for the City of Dublin are shown in the following Table :—

TABLE 5.

INFANTILE MORTALITY, 1930—39.

Year	Births	Deaths of Infants under 1 Year	Rate per 1,000 Births.
1931 ...	10,425	977	94
1932 ...	10,503	1,067	102
1933 ...	10,693	891	83
1934 ...	11,140	878	79
1935 ...	11,451	1,067	93
1936 ...	11,582	1,337	115
1937 ...	11,652	1,231	106
1938 ...	11,633	1,144	98
1939 ...	11,558	1,036	90
1940 ...	11,276	1,039	92

Reference to the foregoing Table will show a decrease in the Infant Mortality rate for 1939, with a slight increase for 1940 over that for the previous year. Premature births and Pneumonia contribute between 30 and 40 per cent. of the total infant mortality. Almost 20 per cent. of the total infant deaths were due to Diarrhœa and Enteritis. Hot summers always increase the death-rate from Diarrhœa and Enteritis, and it seems inevitable to the present time that this price must be paid in infant life. The prevention of disease in infancy is mainly a matter of feeding, and there is no simple preventive measure known to medicine in this connection as effective as breast feeding. The case for breast milk as against any other form of infant feeding has been made time and again from competent examination of readily available statistics. The invariable conclusion drawn

from such studies is that the breast-fed infant not only has the higher survivorship, but having survived, it is on all points of its health record the better placed in every phase of its later life. Chief among the contributory causes of infant mortality is the group of infectious diseases known collectively as infantile diarrhoea and gastro-enteritis. These infections become established in the alimentary canal of the infant as the direct result of introduction through dirty food, that is, food which has been exposed to bacterial contamination. Cow's milk, which has been carelessly handled during the course of its transit from the cow to the infant, is frequently the vehicle of this infection. The milk is a favourable medium for bacteria to multiply in, and it is especially favourable in hot weather—in that season in which dust and flies are most likely to contaminate it. Such contaminated milk is certainly harmful, and in many cases proves fatal to the infant fed on it. It was the realization of the importance of this factor, together with others of a preventable nature, which led to the Infant Welfare movement and the establishment of centres for the instruction of mothers and guardians in infant care. There is to-day no good reason why an infant should die because of ignorance in this vital matter in the City of Dublin.

Infant Welfare Centres are conducted in different parts of the City where mothers may bring their children for thorough examination, and where full instruction is available in all matters concerning the infant's well-being.

In discussing Infant Mortality, it may be observed in Table 6 that 43·21 per cent. of our deaths occurred in the first month of life, that is in the neo-natal period. Furthermore, 15·85 per cent. of our neo-natal mortality occurred on the very first day after birth, so that the problem of infant mortality as contributed to by neo-natal mortality is chiefly the responsibility of the obstetrician and ante-natal supervision.

TABLE 6.

TABLE SHOWING, AT VARIOUS AGES, THE NUMBER OF DEATHS OF CHILDREN UNDER ONE YEAR OF AGE FOR 1939-1940.

AGES.	NO. OF DEATHS.				TOTAL.	
	MALES.		FEMALES.			
	1939	1940	1939	1940	1939	1940
24 hours ...	99	92	65	56	167	148
36 „ ...	2	2	5	2	7	4
1 week ...	51	54	32	53	83	107
1 month ...	114	107	69	83	183	190
2 months ...	91	91	56	59	147	150
3 months ...	71	61	57	54	128	115
6 months ...	93	104	80	74	173	178
1 year ...	86	81	65	66	151	147
Totals ...	607	592	429	447	1,036	1,039

Of the deaths occurring in infants after the first month of life we find various infectious diseases of childhood, especially Whooping Cough, Measles and its complications, and Diarrhœal Diseases as playing a part. These latter diseases are commonly regarded as amenable to preventive measures and amongst them a considerable reduction has been achieved in those due to Diarrhœal Diseases. This reduction cannot be attributed to any single cause, but the resultant of several factors, such as improvements in better housing accommodation bringing with it, of course, up-to-date sanitation; a higher standard of living in the sections of the population which heretofore contributed the majority of the deaths from this cause; the improvement of the quality of milk supplied through the Infant Aid Society to necessitous families; improvement in the provision of assistance for women in childbirth, and the advice and help extended to mothers and infants by health visitors and pre-natal care.

In Table 7 which follows will be found the deaths attributed to Diarrhœa and Enteritis in infants under

one year of age, and in children aged between one and up to the fifth year of life for the years 1931—40 inclusive. That 90 per cent. of the total deaths over the period occurred in the Under One Year Old group brings out the relative importance of this cause of death in the infant.

Table 7.

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Total Deaths	Per cent. Deaths
Under 1 yr.	124	174	131	112	197	249	238	206	200	227	1,858	95·34
1-5 yrs. ...	15	14	15	7	6	7	4	8	9	6	91	4·66

PUERPERAL SEPSIS.

Deaths from Puerperal Sepsis and other puerperal conditions in the year 1939 numbered 6 and 17 respectively. In 1940 the figures were 1 and 15. In the latter group of the causes the deaths represent a rate of 1·5 per 1,000 births registered in 1939 and 1·3 for 1940. The rate for 1938 was 2·1.

The deaths returned from Puerperal Sepsis represent a rate of 0·5 for 1939 and 0·1 for 1940 per 1,000 births registered, as compared with 0·4 for 1938.

In drawing inferences from alterations in rates based on small numbers of cases such as these, great care must be exercised. Considerable fluctuation may be encountered from year to year, but it is satisfactory to note that the puerperal sepsis rate shows a steady decline over the preceding 10 years. A rate of decline such as that suggested in these figures is pleasant to record.

This cause of death following on childbirth has proved very refractory to all efforts directed towards

lowering its incidence among civilised peoples. A considerable proportion of the women who die from puerperal sepsis become infected directly with micro-organisms which they harbour in their own bodies. On the other hand at least one-half of them derive their infection from contact with persons who are in attendance or contact with them at the time of birth or immediately subsequent to it. Persons suffering from sore throats, "colds," sinus trouble or septic wounds and sores should not visit or in any way contact a recently delivered woman. It is urged that women in childbirth should secure skilled attendance before, during and after the event.

The following Table shows the number of births registered in the City, together with maternal deaths and maternal death-rates for the years 1930-39 :—

TABLE 8.

Births Registered		Maternal Mortality					
		Puerperal Sepsis		Other Puerperal Conditions		Total	
Year	No.	Deaths	*Rate	Deaths	*Rate	Deaths	*Rate
1930 ...	10,542	14	1·33	25	2·37	39	3·70
1931 ...	10,425	10	1·0	18	1·6	28	2·7
1932 ...	10,503	18	1·71	15	1·43	33	3·14
1933 ...	10,693	12	1·1	11	1·1	23	2·2
1934 ...	11,140	13	1·2	26	2·3	39	3·5
1935 ...	11,451	12	1·0	19	1·7	31	2·7
1936 ...	11,582	17	1·5	19	1·6	36	3·1
1937 ...	11,652	11	0·9	19	1·70	30	2·6
1938 ...	11,633	5	0·4	24	2·1	29	2·1
1939 ...	11,558	6	0·5	17	1·5	23	2·0
1940 ...	11,276	1	0·1	15	1·3	16	1·4

* Rate per 1,000 Births.

TUBERCULOSIS.

Of the total deaths (716) in 1939, ascribed to this cause of death, 568 were from Pulmonary Tuberculosis, and 148 from other forms of the disease, equivalent to a rate of 1·2 and 0·3 respectively. In 1940 789 deaths were registered, of which 636 were from Pulmonary Tuberculosis and 153 from other forms. This is equivalent to a rate of 1·3 and 0·3 per 1,000 of the population respectively. The corresponding rates for 1938 were 1·2 and 0·3. The figure for Pulmonary Tuberculosis for 1939 represents an increase of 10 in the number of deaths from this cause as compared with the figure for the previous year. The death-rate per 1,000 of the population has shown a consistent decline over the past 10 years, the rate for 1940 being slightly below the average rate for the preceding 10 years (see Table 10). Whilst these figures record a favourable trend in the force of mortality from this disease the problem presented by the facts reflected in the above figures must still be held to be one of the first magnitude. It is customary to assume that for every death from pulmonary tuberculosis in a given year there are roughly ten persons suffering from the same disease in that year. Such an estimate indicates that there were over 5,000 cases of pulmonary tuberculosis in our population in 1939, or more than one person in every 100 of the population was suffering from this serious disease.

In past reports considerable comment has been made on the several factors which influence the incidence of this disease, and although it cannot be claimed that we have anything in the nature of a specific remedy or a particular method of prevention for it, it can be claimed that there are methods of control of the spread of infection which if freely and wisely practised would certainly cause considerable reduction in the number of deaths from pulmonary tuberculosis.

The more essential features of the problem in relation

to causation and prevention may be once more summarised.

In order that the disease may be eradicated it is of prime importance that the sufferer should seek medical advice and treatment at the earliest possible moment. There is at present little inducement to the young wage-earning adult, more especially if he is responsible for the maintenance of a wife and family, to seek early medical advice and take advantage of institutional treatment in the knowledge that his dependents have to rely on a grant from the National Health Insurance Scheme for the bare necessities of life. To this extent the main causes of failure to apply the available remedies at a sufficiently early stage are undoubtedly in the patient himself and the character of the disease.

The onset is not heralded by any grave symptoms which alarm the patient. From good or moderate health he retrogresses steadily until, often, only when he reaches the advanced stage does he consult a doctor. During the whole time which may extend over a year or two he is but vaguely conscious of the impending disaster, and seeks assistance only when finally compelled to give up work.

Furthermore, a serious difficulty in the proper management of such cases as seek treatment arises from the fact that experience has shown that a much longer period of treatment in a Sanatorium is necessary in order to derive the most beneficial results. Short periods in the Sanatorium followed by a return to the usual home conditions are now regarded as worse than useless except possibly for educational purposes.

Amelioration of the home conditions under which the majority of the sufferers from this disease are compelled to live must also form an essential part of any scheme of eradication which has a prospect of success. Therefore, the provision of adequate nourishment, and facilities for the isolation of the patient from the other members of the family on his return from the Sanatorium are as essential in prevention as the provision of institutional treatment.

As a further aid to prevention, preventoria, that is to say institutions where selected contacts who have been particularly exposed to infection may be sent for a period, should be established. It would be the purpose of these institutions to provide for the accommodation and proper nourishment of such persons under medical observation, whereby they would be removed for a time from their infected surroundings in the home and their resistance to the disease would be greatly increased by the care given to them.

TABLE 9.

DEATHS FROM PULMONARY TUBERCULOSIS, CITY OF DUBLIN,
1939.

Age	Males	Females	Total	Per cent.
0-14	10	9	19	3·34
15-24	52	89	141	24·82
25-34	75	85	160	28·17
35-44	61	49	110	19·37
45-54	46	18	64	11·27
55-64	34	17	51	8·98
65-70	15	8	23	4·05
	293	275	568	100·00

1940.

Age	Males	Females	Total	Per cent.
0-14	11	11	22	3·46
15-24	61	88	149	23·43
25-34	65	85	150	23·59
35-44	74	57	131	20·59
45-54	88	24	112	17·62
55-64	35	13	48	7·54
65-70	20	4	24	3·77
	354	282	636	100·00

The deaths from Non-Pulmonary Tuberculosis numbered 148 in 1939 and 153 in 1940, as compared with 135 in 1938. Details of deaths from the various forms are given below for the two years under review :—

	1939	1940
Tuberculous Meningitis ...	66	80
Disseminated Tuberculosis ...	26	6
Tuberculous Peritonitis ...	8	3
Other Forms ...	48	64
	<u>148</u>	<u>153</u>

TABLE 10.

TABLE SHOWING THE NUMBER OF DEATHS FROM ALL FORMS OF TUBERCULOUS DISEASES REGISTERED EACH YEAR DURING THE 10 YEARS 1930-1939 WITH THE RESPECTIVE RATES PER 1,000 of the POPULATION.

Year	Deaths from all forms of Tuberculous Diseases		Deaths from Pulmonary Tuberculosis	
	Number	Rate per 1,000	Number	Rate per 1,000
1930 ...	748	1.82	586	1.43
1931 ...	814	1.98	617	1.50
1932 ...	695	1.67	551	1.32
1933 ...	741	1.76	584	1.39
1934 ...	714	1.68	570	1.34
1935 ...	729	1.79	565	1.41
1936 ...	740	1.59	602	1.29
1937 ...	721	1.52	565	1.19
1938 ...	693	1.50	558	1.20
1939 ...	716	1.50	568	1.20
Total, 1930-39	7,311	16.81	5,766	13.27
Average, 1930-39	731.1	1.681	576.6	1.327
1940 ...	789	1.6	636	1.3

PNEUMONIA.

The deaths returned as caused by Pneumonia numbered 431 (1939) and 457 (1940), representing a rate of 0·90 and 0·94 per 1,000 of the population, respectively, as compared with a rate of 1·23 for 1938. The age-distribution of the deaths from Pneumonia is given in Table 11 for the decennial period 1929-38.

Pneumonia is a term applied to a group of diseases rather than the definition of a uniform clinical condition. Broadly speaking there are two forms generally recognised (*a*) lobar or croupous pneumonia and (*b*) lobular or broncho-pneumonia. The certification of death from both these forms of Pneumonia and Bronchitis cannot be taken to be highly accurate for any one form, since there is considerable latitude for confusion in the clinical diagnosis.

Broncho-pneumonia is a most serious cause of death in young children, frequently occurring secondarily in an undernourished child or following on some disease of childhood such as Whooping-cough or Measles. Examination of Table 11 will show that one-half of all Pneumonia deaths in this city in the years 1929-38 were among the under 5 years old group of the population. The majority of these "pneumonia" deaths were certainly due to broncho-pneumonia. Many of these deaths might be avoided if the primary infection which prepares the way for broncho-pneumonia could receive better attention, better nourishment and nursing in their homes or if the primary infection such as Whooping-cough or Measles could be postponed until a later age-period. It may be noted in Table 11 that nearly twelve times as many pneumonia deaths occur in the first five years of life as do in the next ten-year period.

Pneumonia in one form or another is directly associated with overcrowding, particularly in infancy and early childhood; in adults climatic conditions

are undoubtedly determining factors in conjunction with fatigue, over exertion, alcoholism and injury. It is only when the problem of housing the working-class families has been solved that we may expect any appreciable decline in this important cause of death or disablement.

TABLE 11.

AGE-DISTRIBUTION OF PNEUMONIA DEATHS, 1929-38.

Year	Pneumonia (All Forms)						All Ages
	Under 1 year	1-4	5-14	15-44	45-64	65 + >	
1929	131	136	16	76	96	67	522
1930	190	156	21	59	106	83	615
1931	172	224	49	82	137	109	773
1932	174	133	38	77	113	103	638
1933	154	149	45	76	159	113	696
1934	168	94	31	47	97	84	521
1935	181	136	34	74	143	97	665
1936	223	138	17	73	122	89	662
1937	182	130	14	80	140	110	656
1938	212	112	18	62	105	73	582
Total	1,787	1,408	283	706	1,218	928	6,330
Per Cent.	28.23	22.25	4.47	11.15	19.24	14.66	100.00

INFLUENZA.

The deaths returned as caused by Influenza numbered 36 (1939) and 96 (1940). Of the former figure 17 or 47.23 per cent. were males, and 19 or 52.77 per cent. females. Of the number for 1940, 47 or 48.95 per cent. were males and 49 or 51.05 females. The rate per 1,000 of the population represented by the number for 1940 was 0.19 (0.07 for 1939) as compared with 0.05 for 1938. The figure for 1939 is well below the average returned for the preceding ten

years (1929-1938), while that for 1940 is slightly above the average for the decennial period 1930-1939; the age distribution of the deaths, as may be observed from an inspection of Table 12, presents no unusual feature.

TABLE 12.

INFLUENZA DEATHS, CITY OF DUBLIN.

AGE-SEX DISTRIBUTION, 1939.

Ages	Males	Females	Totals	
0-14	2	3	5	
15-24	—	1	1	
25-34	—	2	3	
35-44	2	2	4	
45-54	3	—	3	
55-64	5	6	11	
65-70	5	5	10	
Totals	17	19	36	

1940.

Ages	Males	Females	Totals	
0-14	3	5	8	
15-24	—	1	1	
25-34	1	3	4	
35-44	5	4	9	
45-54	7	4	11	
55-64	11	9	20	
65-70	20	23	43	
	47	49	96	

The age-distribution of the deaths from Influenza during the decennial period 1931-1940 is set out in

Table 13. It will be noted that nearly 80 per cent. of Influenza deaths occurred at ages later than 45 years.

TABLE 13.

AGE-DISTRIBUTION OF INFLUENZA DEATHS, 1931-1940.

	0-4	5-14	15-44	45+7	Total
1931	6	3	20	93	122
1932	9	17	18	78	122
1933	17	7	29	136	189
1934	2	1	12	16	31
1935	—	7	24	52	83
1936	3	—	6	32	41
1937	4	3	31	146	184
1938	—	2	6	15	23
1939	—	5	7	24	36
1940	—	8	14	74	96
Total Deaths ...	41	53	167	666	927
Per cent. Deaths	4.42	5.72	18.02	71.83	100.00

CANCER.

During the year 1939 Cancer caused 585 deaths, representing a death rate from this cause of 1.2 per 1,000 of the population. 584 deaths were registered in 1940, equivalent to a rate of 1.2. This rate is the same as that for 1938. There is a slight increase in the total number of deaths for 1939, but no significant increase in the rate over that recorded in the past few years. Table 14 sets out the age distribution of deaths from Cancer during the period 1933-38. The column of total deaths per annum shows a tendency to a small definite increase from year to year.

Cancer, as the result of progress in modern diagnostic procedure, is now definitely established as one of the three chief causes of death in all countries from which

we have reliable figures in the statistical sense. There is no simple or direct explanation for the steady climb as a specific death rate due to this cause. In fact there is no single cause for which the observed increase is directly attributable.

In considering the causation of cancer itself, both "exciting" and "predisposing" causes have to be kept in mind. Irritation or repeated slight injuries to tissues may be cited as examples of "exciting" factors. The longer these persist in whatever form, the greater the likelihood of a cancerous condition supervening in the tissue subjected to the irritation. Accordingly when we advert to the fact that there is a higher percentage of our people living on into old age from year to year, as the result of all the agencies directed towards saving the lives of persons who would have died from other causes, it is readily seen that "exciting" factors if continuous in operation have a longer time in which to become effective. An increased incidence in cancer seems to be closely associated with an increased average age in any population if the sample population is not a selected one. Also, it may be that old age in itself brings about changes in tissue activity which result in a cancerous state.

Of the "predisposing" factors cited at times are the influence of diet or again heredity. Neither of these factors has ever been shown to play a definite rôle in causing human cancer.

There is no known preventive measure of general application in the control of cancer incidence but much can be done to prevent death from this cause in many cases, and to considerably ameliorate or extend life in others. Persons who suffer from chronic sores or ulcers of the skin or mouth or chronic digestive troubles or discharges should seek medical advice at the earliest possible moment since surgical treatment or radiation offer considerable hope of recovery in early cancer.

Even those cases of cancer in which there has been a considerable amount of delay in seeking medical aid may hope for a certain degree of relief and in some cases an extension of life for many years which would not be forthcoming without skilled medical intervention.

There are ample facilities in this city for the several types of treatment advocated in the different forms of this disease. Surgical treatment, radiation and deep-ray therapy are fully provided for in the various hospitals and to reap the full benefit of these services the patient has merely to consult his physician or visit one of the out-patient departments of the general hospitals as soon as he becomes aware of an ailment that is tending to become chronic, such ailments as have already been referred to.

TABLE 14.

	Under 1 year	1-4	5-14	15-44	45-64	65 + >	Total
1933 ...	—	—	5	47	253	173	478
1934 ...	—	2	—	190	311	41	544
1935 ...	—	—	4	157	313	53	527
1936 ...	—	—	—	46	267	227	540
1937 ...	—	—	—	63	266	234	563
1938 ...	—	—	1	51	317	222	591

DIARRHŒA AND ENTERITIS.

There was a slight decrease in the number of deaths of children under two years of age from this disease during 1939, whereas the figure for 1940 shows an increase. In 1939 the number of deaths was 209, which is 5 below the number in 1938. The number in 1940 was 233 which is an increase on that for 1939 of 24. These figures are equivalent to a rate of 0.43 and 0.47, respectively, per 1,000 of the population. The respective rates for 1938 and 1937 were 0.45 and 0.51. Of the total deaths registered in 1939, 171,

or 81·82 per cent. were amongst children under 6 months. The corresponding figures for 1940 were 195 or 83·69 per cent. Forty of the deaths occurred in the first quarter ; 35 in the second ; 86 in the third, and 48 in the last quarter of 1939.

In Table 15 will be found figures which present the force of mortality from this cause over the first years of life. The relative importance of this cause of death in the first year of life—the milk feeding age—and particularly in the first 6 months of life is obvious.

TABLE 15.

DEATHS FROM DIARRHŒA AND ENTERITIS, 1939 and 1940.

AGES	MALES		FEMALES		TOTALS	
	1939	1940	1939	1940	1939	1940
Under 6 months	101	113	70	82	171	195
6 mths.—1 year	17	17	12	15	29	32
1 year—2 years	2	4	7	2	9	6
	120	134	89	99	209	233

WHOOPIING COUGH.

This disease not yet being notifiable in the City of Dublin, the actual number of cases occurring in the City cannot be ascertained. Indications as to its incidence, however, can only be judged by the deaths registered. During 1939 there were 26 deaths attributed to this cause, the number in 1940 being 43. The rates per 1,000 of the population were 0·07 and 0·07 respectively compared with 0·07 in 1938.

In Table 16 is set out the age–sex distribution of deaths from Whooping Cough during the two years ; practically all of the deaths occurred in children under 5 years of age, and approximately 68 per cent. occurred in the first year of life. Whooping Cough not only

causes numerous deaths in infants and young children, but frequently is a cause of permanent physical defect in the survivor. The catarrhal state of the lungs which frequently results from this infection present a favourable site for the development of Tuberculosis.

TABLE 16.

DEATHS FROM WHOOPING COUGH, CITY OF DUBLIN, 1939 and 1940.

Ages	Males	Females	Totals	Per cent.
0-1 ...	35	22	47	68·11
1-2 ...	9	8	17	24·64
2-5 ...	1	3	4	5·80
5-7 ...	1	—	1	1·45
	36	33	69	100·00

Table 17 shows the age-distribution of Whooping Cough deaths over the decennial period 1931-1940, and stresses the relative importance of this cause of deaths in those under 5 years of age.

TABLE 17.

AGE-DISTRIBUTION OF WHOOPING COUGH DEATHS, 1931-1940.

	Under 1 year	1-4	5-14	Total
1931 ...	19	12	—	31
1932 ...	66	53	2	121
1933 ...	26	15	1	42
1934 ...	50	35	3	88
1935 ...	10	7	1	18
1936 ...	46	10	1	57
1937 ...	30	42	1	73
1938 ...	22	11	—	33
1939 ...	15	10	1	26
1940 ...	32	11	—	43
Total Deaths ...	316	206	10	532
Per cent. Deaths	59·39	38·72	1·89	100·00

MEASLES.

Measles is not yet included in the list of notifiable diseases which are required to be notified by Medical Practitioners, so that no actual figures as to its yearly incidence are available. Like Whooping Cough and other non-notifiable diseases, its incidence is ascertainable only from the deaths registered. During the year 1939 51 deaths were registered from this cause, all of which were of children under 5 years of age. The rate per 1,000 was 0·11 as compared with 0·08 in 1938. Deaths during 1940 numbered 23, giving a death rate of 0·05 per 1,000 of the population. Thirty-seven deaths occurred from this cause in 1938 and 1931 with 223 deaths represents the last severe epidemic of Measles. On consulting Table 19 the deaths are seen to have been relatively high in number in the year 1931.

Table 18 sets out the age-sex distribution of the deaths recorded during the two years ended 31st December, 1940, and Table 19 gives the age-distribution of deaths from Measles over the past ten years.

TABLE 18.

Ages		Males	Females	Totals	Per cent.
0-1	...	17	12	29	} 100·00
1-2	...	19	17	36	
2-3	...	—	2	2	
3-4	...	5	1	6	
4-5	...	1	—	1	
5-9	...	—	—	—	} —
10+>	...	—	—	—	
		42	32	74	100·00

It may be seen from Table 19 that 95·61 per cent. of the total deaths occurred amongst children under 5 years of which 29·05 per cent. were in the first year of life. A close inspection of this Table will reveal the relative importance of this disease as a cause of death in very young children.

TABLE 19.

AGE-DISTRIBUTION OF MEASLES DEATHS, 1931—1940.

Year			Under 1 year	1-4	5-14	Total
1931	...	...	44	172	7	223
1932	...	...	8	34	—	42
1933	...	...	9	58	5	72
1934	...	...	3	8	—	11
1935	...	...	47	35	5	87
1936	...	...	30	51	9	90
1937	...	...	14	29	3	46
1938	...	...	14	22	1	37
1939	...	...	19	32	—	51
1940	...	...	10	13	—	23
Total Deaths ...			198	454	30	682
Per cent. Deaths			29·05	66·56	4·39	100·00

The returns of notifiable Infectious Diseases in the years 1938, 1939 and 1940 are given in Table 20. Measles, Whooping Cough and Diarrhoeal Diseases are not notifiable in Dublin, thus accounting for the blank entries under these headings.

TABLE 20.

RETURN OF THE NUMBER OF CASES OF INFECTIOUS DISEASES
NOTIFIED UNDER THE "INFECTIOUS DISEASES (NOTIFICATION)
ACT, 1889."

	1938	1939	1940
Typhoid Fever	19	24	62
Paratyphoid B.	—	3	3
Scarlet Fever	1,154	761	627
Diphtheria	958	913	720
Erysipelas	148	85	94
Puerperal Fever	15	16	13
Malaria	—	1	—
Acute Primary and Influenzal Pneumonia	136	151	200
Cerebro-Spinal Fever	25	13	27
Measles	—	—	—
Whooping Cough	—	—	—
Diarrhoeal Diseases	—	—	—
Dysentery (Baileaur)	—	3	1
Acute Anterior Poliomyelitis	2	3	1
Ophthalmia Neonatorum	2	1	11
Encephalitis Lethargica	6	4	3
Total	2,465	1,978	1,762

TABLE 21.

TABLE 21 SHOWING THE NUMBER OF CASES OF THE UNDERMENTIONED DISEASES TREATED DURING THE YEAR 1940 IN THE PRINCIPAL DUBLIN HOSPITALS.

DISEASES	No. of Cases in Hospital at close of previous year	No. admitted during year	Discharged	Died	No. under treatment at close of year
Typhoid Fever	7	25	29	—	3
Typhus	—	—	—	—	—
Smallpox	—	—	—	—	—
Measles	3	283	271	9	6
Scarlet Fever	111	721	712	5	115
Diphtheria	209	980	999	64	126
Pneumonia	17	291	259	29	20

DIPHTHERIA.

In 1939 there were 913 cases of Diphtheria recorded, and in 1940, 720. These figures would indicate that Diphtheria is on the downward trend, though it still prevails in epidemic form in the City. Furthermore the disease, as it is seen here, represents a very virulent form carrying a high case-fatality rate. There were 84 deaths from this disease during 1939, and 56 during 1940, as compared with 92 in 1938. The fatality rate for each of the three years was 9·2, 7·8 and 9·6 per cent., respectively. Accordingly it must be admitted that the Diphtheria notifications are not yet showing any real decline or improvement, in spite of the fact that a scheme of immunisation against this dread disease has been in force in the city for some years past. This, it is felt, is largely due to the failure of parents to avail of the facilities provided at the Public Health Clinics for immunisation of their infants and young children. It is most desirable that these very young children should be protected against this disease since available statistics show that they suffer relatively high fatality-rates compared with the later age-groups. However it is not to be considered a trivial infection even in the later age-groups as Table 23 conclusively points out. Also, it may here be stated that it is known that the case-fatality rates from Diphtheria in the higher aged children show a disturbing tendency to increase in recent years. All of these facts clearly proclaim the importance of seeking protection from this disease, as provided by the immunisation scheme in operation in the city.

Diphtheria is one of the diseases from which the individual can be protected by artificial means. When the prophylactic is efficiently administered it secures safety to a degree of almost absolute certainty, a result which cannot be attained through the haphazard methods of Nature. In this connection it may

be added that the sooner the protection is availed of the better for the infants and younger children of the city ; these children will shortly be entering on school life when they will be brought into intimate contact with a school population which necessarily now has a high " carrier " rate, seeing that the schools population is composed of children who have lived through a prolonged Diphtheria epidemic. Since the number immunised in this group in any recent year has only been a small fraction of the number actually living at that age, it is regrettable to have to record this decline in those treated.

In Table 25 is set out the Diphtheria notifications classified for age, sex and month of occurrence in 1939. Table 22 gives the notifications and deaths at different ages in the both sexes as well as the fatality-rates for the total population at the different ages.

TABLE 22.

CITY OF DUBLIN DIPHTHERIA NOTIFICATIONS AND DEATHS,
CLASSIFIED FOR AGE AND SEX INCIDENCE.

1939.

Age	MALES		FEMALES		TOTAL		Fatality Rate
	Cases	Deaths	Cases	Deaths	Cases	Deaths	
0·4	169	20	173	25	342	45	13·1
5-9	147	18	171	14	318	32	10·1
10-14	41	1	73	2	114	3	2·6
15+>	36	1	103	3	139	4	2·8
	393	40	520	44	913	84	9·2

1940.

Age	MALES		FEMALES		TOTAL		Fatality Rate
	Cases	Deaths	Cases	Deaths	Cases	Deaths	
0·4	131	15	134	16	265	31	11·7
5·9	122	12	152	9	274	21	7·7
10·14	29	2	55	1	84	3	3·6
15+>	27	—	70	1	97	1	1·03
	309	29	411	27	720	56	7·8

TABLE 23.

DEATHS FROM DIPHTHERIA—CITY OF DUBLIN, 1931-1940.

			0·4	5·9	15+ >	Total
1931	...	...	50	19	3	72
1932	...	...	47	33	2	82
1933	...	...	55	55	—	110
1934	...	...	32	42	2	76
1935	...	...	49	36	4	89
1936	...	...	56	49	5	110
1937	...	...	47	34	3	84
1938	...	...	44	42	6	92
1939	...	...	45	35	4	84
1940	...	...	31	24	1	56
Total Deaths ...			456	369	30	855
Per Cent. Deaths			53·33	43·17	3·5	100·00

TABLE 24.

ANTI-DIPHTHERIA IMMUNISATION.

AGE-DISTRIBUTION OF THE IMMUNIZED IN THE YEAR OF PROTECTION.

Ages	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Total
0-4	627	653	1,372	1,862	3,100	4,418	4,866	2,762	2,085	2,304	2,163	26,212
5-9	318	443	800	1,163	4,348	14,130	4,581	1,038	1,256	2,771	2,841	33,689
10-14	9	23	35	134	1,938	11,632	1,746	231	306	872	620	17,546
15+>	—	—	—	3	73	754	310	47	173	230	130	1,720
Total	954	1,119	2,207	3,162	9,459	30,934	11,503	4,078	3,820	6,177	5,754	79,167

TABLE 25.

CITY OF DUBLIN DIPHTHERIA CASES, 1939.

CLASSIFIED IN AGE AND SEX GROUPS.

Age Groups	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Year		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
0-4	10	18	23	17	17	17	13	11	7	9	11	13	11	10	7	15	21	18	12	13	18	13	19	19	169	173	342
5-9	14	11	15	17	13	21	10	11	5	7	12	19	6	12	10	6	13	15	15	18	15	18	19	16	147	171	318
10-14	6	3	6	12	4	9	3	6	4	9	3	3	1	5	-	6	3	8	6	5	3	4	5	3	41	73	114
15+>	3	8	6	11	4	9	2	11	3	9	2	5	5	3	-	6	1	12	2	7	1	10	4	12	36	103	139
	33	40	50	57	38	56	28	39	19	34	28	40	33	20	17	33	38	53	35	43	37	45	47	50	393	520	913
	73		107		94		67		53		68		53		50		91		78		82		97				

TOTAL...913.

SCARLET FEVER.

During the year 1939 761 cases of Scarlet Fever were reported, a case rate of 1·58 per 1,000 of the population. Of these cases, 5 proved fatal, making a mortality of 0·01 per 1,000 of the population. 627 cases were notified during 1940, giving a case rate of 1·28. In the same period deaths from this cause numbered 7, equivalent to a rate of 0·01 per 1,000 of the population.

The age-sex distribution of deaths registered from this cause will be found in Table 26. It may be observed that of the total deaths, 60·00 in 1939 and 71·42 in 1940, occurred amongst children under 5 years of age.

In Table 27 the deaths from Scarlet Fever at various ages are given for the period 1931–1940. Approximately two-thirds of the deaths from this disease in the city occur in children under 5 years of age.

TABLE 26.

1939.

Ages			Males	Females	Total	Per Cent.
0·4	...	...	2	1	3	60·00
5-9	...	...	1	1	2	40·00
10-14	...	...	—	—	—	—
15+>	...	...	—	—	—	—
			3	2	5	100·00

1940.

Ages	Males	Females	Total	Per Cent.
0-4	2	3	5	71·42
5-9	1	—	1	14·29
10-14	1	—	1	14·29
15+>	—	—	—	—
	4	3	7	100·00

TABLE 27.

AGE-DISTRIBUTION OF SCARLET FEVER DEATHS, 1931-1940.

	0-4	5-14	15+>	Total
1931	14	5	—	19
1932	13	7	4	24
1933	8	—	1	9
1934	4	—	—	4
1935	12	2	4	18
1936	48	15	3	66
1937	13	8	5	26
1938	16	3	3	22
1939	3	2	—	5
1940	5	1	1	7
Total Deaths ...	136	43	21	200
Per Cent. Deaths	68·00	21·50	10·50	100·00

TABLE 28.
CITY OF DUBLIN—SCARLET FEVER CASES 1939 AND 1940—CLASSIFIED IN AGE-GROUPS.

	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940
0-4	13	33	21	16	20	14	20	18	17	23	27	22	19	16	33	18	21	15	40	22	36	37	29	34
5-9	22	18	18	20	17	20	20	17	25	26	29	21	24	16	25	12	26	20	37	30	37	27	26	27
10-14	5	4	5	3	8	10	6	7	10	6	6	2	6	6	1	2	2	1	7	7	12	4	11	9
15+	6	5	8	2	14	2	5	6	9	5	3	6	3	3	1	—	4	3	8	2	9	6	10	4
	46	60	52	41	59	46	51	48	61	60	65	51	52	41	60	32	53	39	92	61	94	74	76	74

ENTERIC FEVER.

Notifications of Typhoid Fever numbered 24 in 1939 and 62 in 1940. Three cases of Para B. infection were notified during 1939 and 3 during 1940. The ten deaths (7 in 1939 and 3 in 1940) recorded in the Enteric Fever group were due to infection with B. Typhosus, giving approximately a 10 per cent. case fatality. Although there is a recorded increase of 8 cases for 1939 and 38 for 1940 of enteric fever such increases cannot be considered to have an epidemiological significance. The increase of 8 cases in 1939 over the figure of the previous year has no real significance when the population at risk is considered (487,500).

The increase of 38 cases in 1940 is entirely accounted for by an outbreak in an institution in which it is inherently difficult to bring such a disease under control promptly. Accordingly it can confidently be stated that Enteric Fever is an infectious disease which is well under control in the City of Dublin and the downward trend in its incidence in the past three decades may be expected to continue.

In considering this infection in a population group like the City of Dublin it must be remembered that many thousands of our people are still compelled to live in homes with no adequate sanitary conveniences. These people have to resort to lavatories which are little better than the privy closets of the past, when it was customary for hundreds of cases of the disease to occur in the City each year.

Many of the lavatories referred to are neglected, as common property inevitably is, and generally very much abused. It can be readily understood how the intervention of flies alone could account for the transmission of much of this disease, as it is seen at the present time. Undoubtedly, there are persons

known as “carriers,” who harbour this infection and spread it unwittingly in our population. There are also mild cases which escape diagnosis; both types of individual help to keep this infection going, and many such individuals must necessarily use the type of lavatory to which reference has already been made.

The obvious solution to this minor public health problem is the provision of proper sanitary accommodation for each household, such as is provided for in every modern housing scheme. In Table 29 the age distribution of the deaths from Enteric Fever as recorded during the period 1931–40 will be found. The force of mortality is highest in those aged about 15 years and onwards, as is common experience where reliable statistics are available. Two-thirds of the deaths occurred at ages above 15 years.

TABLE 29.

AGE-DISTRIBUTION OF ENTERIC FEVER DEATHS, 1931–1940.

		Under 1 year	1–5	5–15	15–45	45–65	65+>	Total
1931	...	—	—	1	3	—	—	4
1932	...	—	—	1	13	—	—	14
1933	...	—	—	4	4	1	—	9
1934	...	—	—	8	3	—	—	11
1935	...	—	—	—	2	—	—	2
1936	...	—	—	1	8	2	—	11
1937	...	—	—	—	1	—	—	1
1938	...	—	—	—	1	1	—	2
1939	...	—	—	1	5	1	—	7
1940	...	—	—	—	2	1	—	3
Total Deaths		—	—	16	42	6	—	64
Per cent. Deaths ...		—	—	25·00	65·63	9·37	—	100·00

DYSENTERY.

Three cases of bacillary dysentery were notified in 1939 and three in 1940. These cases were due to infection with variantes of the flexner group. No other form of Dysentery was reported during the year.

CEREBRO SPINAL FEVER.

Notifications of Cerebro Spinal Meningitis numbered 13 (1939) and 27 (1940), representing a case rate of 0·03 and 0·06 per 1,000 of the population, respectively. Deaths from this cause, ascertained from the Registrar-General's weekly returns, numbered 7 (1939) and 5 (1940), equivalent in both years to a rate of 0·01 per 1,000 of the population.

ENCEPHALITIS LETHARGICA.

Four cases in 1939 and 3 in 1940 of Encephalitis Lethargica were notified. Deaths from this cause numbered 5 (1939) and 1, representing a rate of 0·01 per 1,000 of the population. There was obviously a non-notified case in 1939; the case occurred in a hospital and there was failure to notify same.

ACUTE ANTERIOR POLIOMYELITIS.

There were 3 cases of Acute Anterior Poliomyelitis notified during the year 1939 and 1 in 1940. Such an incidence of infection does not represent the occurrence of this disease in epidemic form.

TYPHUS FEVER.

There were no cases of Typhus Fever notified in the City of Dublin during the period under review.

OPHTHALMIA NEONATORUM.

One case of Ophthalmia Neonatorum was notified in 1939. In 1940 eleven notifications were received.

**VERGEMOUNT FEVER HOSPITAL,
CLONSKEAGH.**

ANNUAL REPORT FOR THE YEAR ENDING
31ST DECEMBER, 1940.

BY

F. N. ELCOCK, L.R.C.P.S.I., D.P.H.,
Resident Medical Superintendent.
Assistant Medical Officer of Health.

HOSPITAL STAFF, 1940.

Medical Superintendent :

F. N. ELCOCK, L.R.C.P.S.I., D.P.H.

House Physicians :

E. E. CLARKE, M.B., B.Ch. (to 30th June).

D. A. COLLINS, M.B., B.Ch., D.P.H. (to 31st Dec.).

Lady Superintendent :

MISS M. J. CUSACK.

Assistant Matron :

MISS A. McKEON.

Home Sister :

MISS E. McDONAGH.

Sister Housekeeper :

MISS E. F. KELLY.

Clerk :

MISS MOYA McDONAGH.

During the year ending 31st December, 1940, seven hundred and forty-four cases were admitted to Vergemount Fever Hospital. Seventy-one remained in Hospital at the close of the year 1939, and the total number under treatment was 815. There were forty-four deaths, and 781 were discharged cured.

Eighty-two remained in Hospital at the end of the year. The mortality rate for all cases under treatment was 5·33 per cent., as compared with 6·11 per cent. in 1939, and 4·32 per cent. in 1938.

Diphtheria admissions showed a falling off as compared with last year, but the type was a Virulent one, and was again responsible for the high fatality rate in this disease. This infection caused 19 deaths, thus accounting for 43 per cent. of the total Hospital mortality.

The health of both the Nursing and Domestic Staffs was, on the whole, satisfactory. Five contracted Influenza and three Tonsillitis. One Staff Nurse showed early signs of Pulmonary Tuberculosis and was transferred to the Meath Hospital for special treatment. One member of the Domestic Staff who was diagnosed as a case of Pulmonary Tuberculosis was transferred to Sir Patrick Dun's Hospital for X-ray and was later admitted to Crooksling Sanatorium.

Forty-seven members of the Staff were Schick Tested on taking up duty, of whom ten were found to be positive and were immunised. As in recent years, new members of the Staff were swabbed for the identification of the carrier state, and the results showed that no temporary Nurse was found to harbour virulent Diphtheria organisms in her throat. No member of our Staffs (Nursing or Domestic) who was immunised contracted this highly infectious disease during the year.

Dr. E. E. Clarke, House Physician left the Staff on the 30th June, 1940, having completed his period of

office. He was then appointed Temporary Resident Medical Officer to the Dublin Union. Dr. D. A. Collins left at the end of the year, to take up duty as House Physician at Crooksling Sanatorium. Staff Nurses Flanagan and Finn resigned their posts to take up Nursing duties in the Irish Army; and Staff Nurse Dickenson left to take up a post in the County Hospital, Tullamore.

Numerous repairs were carried out in the older blocks, which required an expenditure of a proportionately much greater amount of money than would be in the case of new buildings. The Doctors' Quarters were decorated externally, and the usual whitewashing of the kitchen and basement was also carried out.

In conclusion, I would like to thank both Dr. Clarke and Dr. Collins for their co-operation during a busy year; and also the Nursing Staff, under the capable supervision of Miss Cusack, Lady Superintendent, for their unsparing devotion to the patients, and loyal discharge of their arduous duties.

SUMMARY SHOWING STATISTICS FOR THE YEARS 1939 AND 1940.

	1940.	1939.
In Hospital on 31st December previous year	71	61
Admitted during the year	744	593
TOTAL	815	654
Discharged and Died during the year	733	583
In Hospital on 31st December	82	71
DEATHS	44	40

TABLE 1.—SHOWING THE NUMBER OF ADMISSIONS AND THE NUMBER OF DEATHS FOR THE YEARS ENDING 31ST DECEMBER, 1939 AND 1940.

DISEASES	No. of Cases Admitted		Number Died		Case Mortality	
	1939	1940	1939	1940	1939	1940
Scarlet Fever	193	172	—	2	—	1·16
Diphtheria	214	155	32	19	14·95	12·25
Tonsillitis	118	146	—	—	—	—
Measles	14	46	3	4	21·42	8·70
Rubella	3	30	—	—	—	—
Pertussis	11	25	3	5	27·27	20·00
Broncho-Pneumonia ...	1	23	1	1	100·00	4·34
Lobar-Pneumonia ...	—	18	—	—	—	—
Enteritis	1	14	—	3	—	21·42
Bronchitis	2	14	—	—	—	—
Influenza	—	9	—	—	—	—
Vincent's Angina ...	5	8	—	—	—	—
Erysipelas	—	8	—	—	—	—
Puerperal Sepsis ...	—	6	—	—	—	—
Mumps	2	6	—	—	—	—
Varicella	1	5	—	—	—	—
Quinzy	3	5	—	—	—	—
Tuberculous Meningitis	—	3	—	3	—	100·00
Pneumococcal Meningitis	—	2	—	2	—	100·00
Influenzal Meningitis ...	—	2	—	2	—	100·00
Meningococcal Meningitis	—	2	—	1	—	50·00
Pleurisy	—	2	—	—	—	—
Undulant Fever	—	1	—	—	—	—
Acute Pneumonic Phthisis	—	1	—	1	—	100·00
Acute Pericarditis ...	—	1	—	1	—	100·00
Other Diseases	25	40	*1	—	4·00	—
	593	774	40	44	6·74	5·91

* Pneumococcal Septicaemia.

DIPHTHERIA.

One hundred and fifty-five cases were admitted, which shows a decrease of 69 from the previous year. Nineteen died, giving a mortality rate of 12·25 per cent. as compared with 14·95 per cent. in 1939, and 9·66 per cent. in 1938. Of the 19 deaths 12 were admitted beyond medical aid. It was noted that

32 were admitted on the third day of illness ; 27 on the fourth day ; and 28 on the fifth day and later. Thirty-three cases were of the toxic type and 8 were classified as haemorrhagic. It is a great pity that these cases were not admitted in an early stage of the disease, so as to benefit by antitoxin. As in a previous report, I would point out that the chances of a toxic case of Diphtheria in a child recovering when three days have passed before antitoxin is administered are practically nil.

Treatment by combined active and passive immunity was introduced during the years as a method of dealing with these toxic cases. Formal Toxoid was the preparation used, and four injections were given in amounts commencing with 0.5 cc. to a maximum of 2 cc. Good results were noticed, particularly a diminution in the frequency of paralyses, and the high percentage of negative release swabs obtained. Of the 15 cases who received this combined treatment the release swabs from same were all found to be negative.

Seventeen cases received anti-toxin by the intravenous route. Eight cases showed marked symptoms and signs of laryngeal obstruction, and of those one required immediate tracheotomy. This patient's obstruction was immediately relieved, but he subsequently died of cardio-vascular failure ; in fact, this case was practically moribund on admission, and was admitted too late in the disease to benefit by operation.

Fifty-four Virulence Tests were performed during the year, and of these 37 were of the virulent gravis type ; one virulent mitis type ; three non-virulent mitis type ; four virulent intermediate type and one non-virulent intermediate type.

There were three persistent virulent carriers of Diphtheria organisms, in spite of intensive local antiseptic treatment, and Tonsilectomy was performed with the consent of the parents. Subsequently,

negative release swabs were obtained from all the throats of these patients.

One patient during convalescence from an attack of Laryngeal Diphtheria developed an acute abdomen, and was transferred to the Richmond Hospital for immediate operation, where she eventually made a good recovery.

Three patients required treatment in an Iron Lung for Respiratory Paralysis, following an attack of Toxic Diphtheria. The apparatus used in this Hospital is of the type known as the "Both Respirator." The principal involved is to apply a negative pressure to the thorax rhythmically sixteen to twenty times per minute, so that the thorax expands, causing inspiration. The recoil of the chest results in expiration. The whole body below the neck is enclosed in an air-tight chamber, and the pressure at regular intervals is maintained by means of an electrically driven suction bellows.

TABLE 2.

SHOWING CLINICAL FORMS AND CASE MORTALITY.

TYPE.	Number Admitted.	Died.	Case Mortality per cent.
Faucial	110	*8	7·27
Faucial and Nasal ...	23	†10	43·47
Nasal	10	—	—
Laryngeal	8	1	12·50
Nasal and Aural ...	2	—	—
Faucial and Cutaneous ...	1	—	—
Faucial, Nasal and Aural ...	1	—	—
TOTAL ...	155	19	12·25

* Two cases were of the Hæmorrhagic type.

† Six cases were of the Hæmorrhagic type.

TABLE 3.

SHOWING DIPHTHERIA DEATH RATE, ACCORDING TO DAY OF DISEASE ON WHICH SERUM WAS ADMINISTERED.

DAY OF DISEASE.				No. of Patients.	Died.	No. of Deaths per cent.
1st	...	...	...	13	—	—
2nd	...	...	...	55	—	—
3rd	...	...	...	32	6	18·75
4th	...	...	...	27	6	22·22
5th and later	...	...	...	28	7	25·00
TOTAL				155	19	12·25

TABLE 4.

SHOWING DIPHTHERIA CASES CLASSIFIED IN AGE AND SEX GROUPS FOR THE YEAR 1940.

—		0-4	5-9	10-14	15-24	25 + >	Total
Male	...	29	27	8	2	—	66
Female	...	35	37	8	8	1	89
							155
DIED.							
Male	...	8	4	1	—	—	13
Female	...	3	3	—	—	—	6
							19

TYPES OF POST DIPHTHERITIC PARALYSIS.

Palatal	....	....	....	31
Pharyngeal		....	....	6
Cervical	....	....	....	6
Diaphragmatic		....	....	2
Larynx	....	....	....	2
Facial	....	....	....	1
Ocular	....	....	....	1
Abdomen	....	....	....	1
Bulbar	....	....	....	1
Bowel	....	....	....	1
Bladder	....	....	....	1
Neuritis	....	....	....	1
				—
	Total		....	54
				—

Otorrhœa occurred in 8 cases ; Acetonuria in 33 cases ; Albuminuria in 17 cases ; and Haematuria in one case.

Circulatory Failure occurred in 29 cases. Of these 21 were due to “early” cardiac failure, and the remaining 8 to the late type. Cardiac irregularities included :—

Arrhythmia and Extrasystoles			23
Cardiac Paresis	....	....	11
Fibrillation	....	....	2
Tachycardia	....	....	2
			—
			38
			—

CONCURRENT INFECTIONS.

Two patients on admission were found to be suffering with concurrent Diphtheria and Broncho-Pneumonia ; one with Diphtheria and Whooping Cough ; one with Diphtheria and Measles ; and one with Diphtheria and Eczema.

One hundred and seventy-four cases (who were admitted as suspected cases of Diphtheria) were found to be suffering from non-diphtheritic ailments. They are classified as follows :—

Tonsillitis	....	....	146
Vincent's Angina	....	....	8
Quinzy	....	....	5
Influenza	....	....	3
Dental Caries	....	....	2
Rheumatism	....	....	2
Catarrhal Laryngitis		....	2
Odium Albicans	....	....	1
Convulsions	....	....	1
Streptococcal Conjunctivitis	....		1
Cervical Adenitis	....	....	1
Acetonuria	....	....	1
Bronchitis	....	....	1
			<hr/>
			174
			<hr/>

All of the above cases recovered.

CASES OF RESPIRATORY PARALYSIS.

During the year three cases were treated by mechanical means for paralysis of the respiratory muscles in a Both Respirator. All of these patients suffered from an attack of Toxic Diphtheria on admission, one of these cases being admitted on the fourth day of illness, and the remaining two on the fifth day. Late cardiac failure was responsible for these deaths.

TABLE 5.

SHOWING ANALYSIS OF ABOVE CASES.

Age	Sex	Day of Admission.	Paralysis with Day of onset.	No. of Days under Treatment	Remarks.
Years 4	M.	4th	Palatal (13th) Pharyngeal (36th) Diaphragmatic (36th) Facial (40th) Neck (42nd) Larynx (44th)	8	Removed from Respirator on the 8th day, owing to late cardiac failure.
2½	M.	5th	Palatal (20th) Pharyngeal (32nd) Neck (41st) Diaphragmatic (47th) Larynx (49th) Abdomen and bowel (51st)	6	Removed from Respirator owing to late cardiac failure, due to fibrillation.
5	M.	5th	Palatal (21st) Pharyngeal (33rd) Diaphragmatic (34th) Ocular (34th) Larynx (36th) Bulbar (40th) Bowel and Bladder (40th)	3	Taken out of Respirator owing to generalised paralysis. Patient too restless.

SCARLET FEVER.

Scarlet Fever contributed the largest number of cases admitted for the year. One hundred and seventy-two cases were treated, which shows a decrease of twenty-one from the previous year. There were two deaths, giving a case mortality of 1·16 per cent., as compared with no deaths for 1939, and 1·06 per cent. for 1938. Analysis of the two deaths showed that in one case a boy of fourteen years (who was seven days ill before admission) died four days after admission with concurrent Scarlet Fever (Toxic) and Lobar Pneumonia. The second case was that of a girl of four years (who was admitted on the third day of her illness) with Septic Scarlet Fever, and who, with intensive treatment with Scarlatinal Antitoxin and Sulphonamides, died on the eighteenth day of illness, having developed pleural effusion, which was followed by pericarditis. The remaining cases were, with the exception of two, classified as Simple Scarlet Fever. Scarlatinal Antitoxin in doses of from 3,000 to 6,000 units had a definite effect upon the initial toxic manifestations. Desquamation in the majority of cases did not occur. Sulphonamides were used with the view of lessening the risk of complications. *The following complications were noted, viz. :—*

Adenitis	....	....	....	43
Rhinorrhoea		....	....	16
Carditis	....	....	....	9
Albuminuria and Nephritis			....	7
Otorrhoea	....	....	....	6
Abscesses	....	....	....	4
Whitlows	....	....	....	4
Arthritis	....	....	....	3
Vaginitis	....	....	....	1
			—	
				93
			—	

TABLE 6.—SHOWING THE CLINICAL VARIETIES ADMITTED.

Type	Number of Cases admitted	Deaths	Case Mortality per cent.
Simple Scarlet Fever ...	158	—	—
Toxic Scarlet Fever ...	11	1	9·09
Sub-Toxic Scarlet Fever ...	2	—	—
Septic Scarlet Fever ...	1	1	100·00
	172	2	1·16

TABLE 7.—SHOWING THE NUMBER OF SCARLET FEVER CASES CLASSIFIED IN AGE AND SEX GROUPS FOR THE YEAR 1940.

—	0-4	5-9	10-14	15-24	25+ >	Totals
Male ...	38	33	6	4	1	82
Female ...	28	50	6	2	4	90
Totals ...	66	83	12	6	5	172

Concurrent Infections.—Five cases on admission suffered concurrently with Scarlet Fever and Diphtheria; and two with Scarlet Fever and Measles.

MEASLES.

Forty-six patients were admitted to Hospital suffering with Measles, of whom four died, giving a fatality rate of 8·7 per cent., as compared with 21·4 per cent. in 1939. An analysis of these four deaths showed that one baby, aged seven months, succumbed after five weeks from Marasmus and a chronic chest,

following an attack of Broncho-Pneumonia. The second case, aged one year, lived only six hours after admission. The third case, aged one and a half years (21 days ill before admission) died from cardiac failure following Empyema (post operative), due to an attack of Broncho-Pneumonia; and the remaining case, a boy of four years (seven days ill before admission) died from the rare complication acute encephalomyelitis.

The complications noted in the forty-two patients were as follows:—

Broncho-Pneumonia	....	4
Laryngitis	....	2
Enteritis	....	1

Four cases were admitted with concurrent Measles and Diphtheria, and one case with Measles and Pertussis.

PERTUSSIS.

Twenty-five cases were admitted during the year, of whom five died, giving a mortality rate of 20 per cent., as compared with 27·2 per cent. for the year 1939. The cause of death in three of these cases was due to Broncho-Pneumonia. One case, a baby of 8 months (fourteen days ill before admission), lived only four hours after admission; another case (21 days ill before admission) lived only fifty-one hours after admission; and the third case (22 days ill before admission) died after four hours in Hospital. The remaining two deaths were caused by Enteritis. The first, a baby of four months (21 days ill before admission) lived for five weeks, and the second case, a baby of seven weeks (14 days ill before admission), lived three weeks, but was admitted too late to benefit by treatment. An examination of the faeces in each case failed to recover any organisms of the dysentery, enteric or salmonella group.

The following complication occurred in the twenty cases who recovered :—

Broncho-Pneumonia	....	12
Enteritis	....	4
Otorrhoea	....	2

PNEUMONIA.

Forty-one cases of Pneumonia were treated for the year, with one death, giving a mortality rate of 2·44 per cent., which I consider a very satisfactory result. Eighteen cases were Lobar Pneumonia and twenty-three Broncho-Pneumonia.

LOBAR PNEUMONIA.

Of the eighteen cases admitted there were no deaths. Two patients developed a pleural effusion, which cleared up with treatment in the course of three weeks. Typing of sputum was carried out in two cases, and the result showed Type 1 and type 111 Pneumococcus. M. & B. 693, in conjunction with Anti-Pneumococcal Serum (type specific, where possible) proved very successful in the treatment of this infection.

BRONCHO-PNEUMONIA.

Of the twenty-three cases admitted, there was one death, which shows a mortality rate of 4·34 per cent. M. & B. 693 and Anti-Pneumococcal Serum (Types 5 and 7) were responsible for so many lives saved.

PUERPERAL SEPSIS.

Six cases were treated during the year, and all recovered. One patient was exceedingly ill for three weeks, having run a remittent pyrexia (101° to 103°F.), which eventually fell by lysis. A sample of blood in this case was collected in sterile broth and forwarded for examination, and the report showed that the culture yielded a pure growth of a Gram Negative

Bacillus, which on investigation appeared to be Bact. Alkaligenes (B. Faecalis Alkaligenes). This type of infection was found to be quite resistant to the sulphonamide group of drugs.

MENINGITIS.

Nine cases of Meningitis were admitted for treatment, and were classified as follows :—

Type			Number of Cases	Deaths	Case Mortality
					per cent.
Tuberculous	...	...	3	3	100
Meningococcal	...	...	2	1	50
Pneumococcal	...	...	2	2	100
Influenzal	...	...	2	2	100

Of the two cases of Meningococcal Meningitis, a child of five years (who was four days ill before admission) developed Broncho-Pneumonia, and died on the fourteenth day of the disease. M. & B. 693 and Anti-Meningococcal Serum were administered, and the cerebro-spinal fluid after the second lumbar puncture was found to be sterile on culture. The second case, a baby of seven months, was the first case to be treated in Vergemount Fever Hospital, and possibly in Eire, without the use of Anti-Meningococcal Serum. M. & B. 693 alone was the drug used, and a total of 10 Gms. was given. This patient made a very rapid recovery. An analysis of the reports of the cerebro-spinal fluids shows how quickly M. & B. 693 caused them to become sterile. It was also noticed that the cell count rapidly dropped due to the concentration of this drug. There were no ill effects, in fact, a marked amelioration within twenty-four hours was observed in this case.

Report on first C.S.F.

“Cells=16,000 per cmm. approx., mainly Polymorphs.
 Chlorides=700 Mgm. per 100 cc.
 Total protein=Over 200 mgm. per 100 cc.
 Meningococci seen in fairly large numbers on direct examination. Meningococci grew in pure culture.”

Report on second C.S.F.

“Cells=13,000 per cmm. approx. predominantly Polymorphs.
 Chlorides=700 mgm. per 100 cc.
 Total Protein=over 200 mgm. per 100 cc.
 No organisms seen on direct examination.
 Sterile on culture.”

Report on third C.S.F.

“Cells=800 per cmm.
 Total Protein=190 mgm. per 100 cc.
 No organisms seen on direct examination.
 Sterile on culture.”

Report on Final C.S.F.

“Cells—300 per cmm. No organisms seen on direct examination. Sterile on culture.”

Pneumococcal Meningitis.—Of the two cases admitted, one, a baby of three months old (six days ill before admission), lived only nine hours in Hospital. The report of the C.S.F. showed that “Pneumococcus Type 5, grew in pure culture.” The second case, a man of twenty-eight years (eighteen days ill before admission) died from Pneumococcal Meningitis following a Septicaemia. From both the blood culture and the cerebro-spinal fluid Pneumococcus Type 111 grew in pure culture.

Influenzal Meningitis.—Two cases were treated, which proved fatal. One, a baby of five months (six weeks ill before admission), lived five days in Hospital. Five specimens of cerebro-spinal fluid, and one of cisternal fluid were submitted for examination, and in each of the specimens the following was reported:—

“H. Influenzae grew in pure culture.”

The second case, a baby of seven months (two days ill before admission) lived for thirty-one days after admission to Hospital. As in the previous case, five specimens of C.S.F. and one of cisternal fluid were submitted for examination, and the bacteriological report showed that in each of them "H. Influenzae grew in pure culture." M. & B. 693, Streptocide and Prontosil were all used but had no effect on the course of the disease. This type of Meningitis rarely recovers under the age of two years.

UNDULANT FEVER.

One case of Undulant Fever was treated during the year, and recovered. The patient, a male of 27 years, was admitted for observation (P.U.O.). He was by Trade an Egg Canvasser, and gave a history of drinking several pints of milk per day in different shops. A sample of blood was forwarded for examination, and the agglutination test was reported as follows:—

“ This serum agglutinated Br. Abortus to a titre of 1-5000. This Titre is diagnostic of Undulant Fever.”

A course of M. & B. 693 for seven days brought his temperature to normal, and convalescence was uninterrupted. He was discharged after eight weeks' stay in Hospital.

RUBELLA.

Thirty cases were treated during the year, of whom sixteen were admitted as suspected cases of Scarlet Fever. All made good recoveries.

ERYSIPELAS.

Eight cases were admitted. The type was mild, and all patients did well.

MUMPS AND VARICELLA.

Six cases of Mumps and five of Varicella were treated, and there were no complications.

ANTI-DIPHTHERIA IMMUNISATION.

Two hundred and twenty-one cases were immunised (with the consent of the parents) during their stay in Hospital. One hundred and fifty-three received two injections of A.P.T.; 26 received three injections of T.A.F.; and 42 had one injection of A.P.T., and these were advised to attend the Child Welfare Centre for the second injection.

TABLE 8.

SHOWING THE NUMBER OF CASES SCHICK TESTED AND THE AGE GROUPS FOR THE YEAR 1940.

	0-4	5-9	10-14	15-24	25+ >	Totals
Schick Negative	3	11	7	21	26	68
Schick Positive	2	13	2	17	4	38
	5	24	9	38	30	106

TABLE 9.

SHOWING NUMBER OF CASES WHO WERE IMMUNISED BEFORE ADMISSION TO HOSPITAL, AND WHO HAD A POSTERIOR SCHICK TEST PERFORMED.

	0-4	5-9	10-14	15-24	25+ >	Totals
Schick Negative	31	65	36	11	3	146
Schick Positive	11	9	4	2	—	26
	42	74	40	13	3	172

A perusal of Table 9 shows that 172 cases were immunised before admission to Hospital, and 26 were found on Schick Testing to be "Positive." It will also be seen from this table that 85 per cent. were immune. Of the twenty-six cases who were found "Positive," nine of them had their second injection less than six months before being Schick Tested. No reactions were encountered with the T.A.F., but slight fleeting local reactions occurred in some of the cases who were inoculated with A.P.T.

TABLE 10.

SHOWING ANALYSIS OF BACTERIOLOGICAL WORK PERFORMED FOR THE HOSPITAL DURING THE YEAR.

Swabs for Diphtheria :—

Faucial	...	...	1,250
Nasal	...	...	402
Aural	...	...	23
Cutaneous	...	...	7
Conjunctival	...	...	4
Vaginal	...	...	3
Lingual	...	...	1
TOTAL			1,690

Swabs for identification of Carrier State (Diphtheria)	64
Virulence Tests for Diphtheria	54
Cerebro-Spinal Fluids	29
Smears for Vincent's Angina	22
Sputa Examinations	19
Widal Reactions	17
Blood Cultures	10
Faeces Examinations	8
Wasserman Reactions	7
Pleural Fluids	6
Sputa Typing	3
Fluid from Cisterna Magna	3
Pus	2
Blood Counts, etc.	4
GRAND TOTAL	1,938

TABLE 11.

ANALYSIS OF CASES ADMITTED BEYOND RECOVERY IN 1940.

Reg. No.	Age.	Days ill before Admission.	In Hospital.	Disease and Remarks.
62	9 yrs.	6	19½ hrs.	<i>Haemorrhagic Diphtheria.</i> Acute early cardiac failure on admission.
108	1 mth.	?	8½ hrs.	<i>Haemorrhagic Diphtheria.</i> Congenital Debility.
130	14½ yrs.	7	4 days	<i>Toxic Scarlet Fever.</i> Complicated by Lobar Pneumonia. Extremely restless and delirious on admission.
142	1 yr.	3	6 hrs.	<i>Broncho-Pneumonia following Measles.</i> Moribund on admission.
186	2 yrs.	6	5 days	<i>Toxic Diphtheria.</i> Cardiac Failure on admission.
208	10 yrs.	4	2 days	<i>Haemorrhagic Diphtheria.</i> No response to treatment.
307	17 yrs.	22	6 days	<i>Tuberculous Meningitis.</i>
319	6 yrs.	18	6 days	<i>Tuberculous Meningitis.</i>
354	5 yrs.	5	7 hrs.	<i>Haemorrhagic Diphtheria.</i> Dying on admission.
379	2 yrs.	4	3½ dys.	<i>Haemorrhagic Diphtheria.</i> Heart Failure on admission.
410	3 wks.	22	4½ hrs.	<i>Broncho-Pneumonia following Pertussis.</i> Moribund.
411	4 yrs.	7	72 hrs.	<i>Encephalomyelitis following Measles.</i>
418	1½ yrs.	21	12 days	<i>Broncho-Pneumonia following Measles.</i> Empyema developed. Operation unsuccessful. Hopeless on admission, markedly toxic.
449	7 wks.	14	3 wks.	<i>Acute Gastro-Enteritis following Pertussis.</i>
481	5 mths.	42	5 days	<i>Influenzal Meningitis.</i>

TABLE 11—continued.

Reg. No.	Age.	Days ill before Admission.	In Hospital.	Disease and Remarks.
499	5 wks.	21	11 dys.	<i>Enteritis.</i> Extremely emaciated and dehydrated on admission. Admitted too late to benefit by treatment.
513	1½ yrs.	2	1 hr.	<i>Laryngeal Diphtheria.</i> Admitted in last stages—pulseless. Tracheotomy relieved obstruction.
549	3 wks.	3	27½ hrs.	<i>Toxic Diphtheria.</i> Moribund on admission.
555	3 mths.	6	24 hrs.	<i>Pneumococcal Meningitis.</i> Dying on admission.
567	1½ yrs.	14	4 hrs.	<i>Broncho-Pneumonia following Pertussis.</i>
568	6½ yrs.	5	1 hr.	<i>Acute Pericarditis.</i> Moribund on admission.
581	9 yrs.	21	5 days	<i>Tuberculous Meningitis.</i>
591	4 mths.	21	5 wks.	<i>Broncho-Pneumonia following Pertussis.</i> Acute gastro-enteritis on admission. Extremely emaciated and dehydrated.
606	18 yrs.	28	24 days	<i>Acute Pneumonic Phthisis.</i>
676	28 yrs.	18	25 dys.	<i>Pneumococcal Septicaemia (Type 111),</i> <i>which was followed by Pneumococcal</i> <i>Meningitis (Type 111).</i>
700	2 yrs.	21	51 hrs.	<i>Broncho-Pneumonia following Pertussis.</i> Moribund on admission.
717	3 mths.	16	12 dys.	<i>Enteritis, Congenital Debility and Marasmus.</i>

TUBERCULOSIS INSTITUTIONS

REPORT BY DR. J. T. DANIEL, CHIEF TUBERCULOSIS OFFICER,

Tuberculosis Dispensaries, Charles Street West and
Meath Hospital.

During the year 1939 2,199 primary attendances were recorded at the Dispensaries of which 1,081 or 49.11% were found to be suffering from Tuberculosis. In 1940 the figures were 2,823 and 1,211 or 42% respectively. The following Table A. shows the number of new cases examined at the Dispensaries each month during the year.

TABLE A.

Month.	Charles St. West Dispensary.		Meath Hospital Dispensary.		Total	
	1939	1940	1939	1940	1939	1940
January ...	138	133	45	73	183	206
February ...	151	194	60	103	211	297
March ...	170	165	59	80	229	245
April ...	118	203	48	73	176	276
May ...	169	219	77	72	246	291
June ...	178	205	90	59	258	264
July ...	132	162	79	64	211	226
August ...	87	184	48	98	135	232
September	85	143	27	48	112	191
October ...	95	163	41	54	136	217
November	134	196	36	63	170	259
December ...	85	78	47	41	132	119
TOTAL ...	1,542	2,045	657	778	2,199	2,823

Table B shows the number of attendances of old cases at the Dispensaries and under observation at the beginning of each month.

TABLE B.

Month	Charles St. West Dispensary		Meath Hospital Dispensary		Total	
	1939	1940	1939	1940	1939	1940
January ...	1,892	2,048	911	837	2,803	2,885
February ...	1,964	1,999	824	811	2,788	2,810
March ...	2,149	1,956	895	855	3,044	2,811
April ...	1,771	2,140	763	819	2,534	2,959
May ...	1,991	2,254	806	871	2,797	3,125
June ...	2,057	1,885	805	795	2,862	2,680
July ...	1,954	1,977	821	847	2,775	2,824
August ...	2,001	1,900	779	814	2,780	2,714
September	1,902	1,981	756	854	2,658	2,835
October ...	1,967	2,286	812	942	2,779	3,228
November	2,099	2,128	827	849	2,926	2,977
December ...	1,489	2,008	661	667	2,150	2,671
TOTAL ...	23,236	24,562	9,660	9,961	32,896	34,523

Table C shows the number of Domiciliary visits paid by the Dispensary nurses during the year.

TABLE C.

Month	Charles St. West Dispensary		Meath Hospital Dispensary		Total	
	1939	1940	1939	1940	1939	1940
January ...	1,227	1,367	532	607	1,759	1,974
February ...	1,317	1,269	459	501	1,776	1,770
March ...	1,381	1,207	504	514	1,885	1,721
April ...	1,069	1,430	448	622	1,517	2,052
May ...	1,182	1,455	533	569	1,715	2,024
June ...	1,314	1,304	565	574	1,879	1,878
July ...	1,325	1,322	431	624	1,756	1,946
August ...	1,341	1,354	630	568	1,971	1,922
September	1,072	1,357	591	582	1,663	1,939
October ...	1,345	1,407	671	596	2,016	1,999
November	1,436	1,327	576	579	2,012	1,906
December ...	1,217	1,232	469	503	1,686	1,735
TOTAL ...	15,226	16,031	6,409	6,835	21,635	22,866

2,342 Domiciliary visits were paid by the Dispensary Medical Officer and 1634 contacts examined during the two years.

	1939	1940
Number of Dwellings notified for Disinfection	723	721
Number of Dwellings notified as Insanitary	161	85

During the period under review 645 patients were sent by the School Medical Officers for examination. A Report was forwarded in each case.

Number of A.P.T. refills administered 2,105.

Number of exposures of Artificial Sun Light treatment administered :—

1939	1940
733	897

CROOKSLING SANATORIUM.

REPORT BY DR. A. J. WALSH,

RESIDENT MEDICAL SUPERINTENDENT.

Report for the Two Years ended 31st December, 1940.

ADMISSIONS AND DISCHARGES, ETC.

During the years under review the admissions, discharges, etc., were as set forth in the following tables :—

1939.

Remaining 31st Dec., 1938	Admitted	Discharged Home	Trans- ferred	Died	Remaining 31st Dec., 1939
180	351	300	19	14	198

1940.

Remaining 31st Dec., 1939	Admitted	Discharged Home	Trans- ferred	Died	Remaining 31st Dec., 1940
198	298	249	30	15	202

The diminution in the number of patients admitted is a direct consequence of the diminution in the number of patients discharged and is by no means an indication of a falling off in the number of patients awaiting admission. The lamentably long waiting-list testifies to the contrary. It may be wondered why it is that this waiting list has reached such proportions. The explanation lies partly in the fact that we are receiving more and more patients of the type for whom prolonged sanatorium treatment is indicated as is evidenced by the steady increase in the number of patients suitable for one or other of the special forms of treatment, and partly in the fact that patients appear to be becoming more educated to the idea that it is useless to enter a sanatorium and remain for only a month or so.

The following tables indicate the sex and age-periods of the patients admitted:—

1939.

	15-24	25-34	35-44	45-54	55-64	65+	Total
Males	75	59	49	29	8	2	222
Females	63	51	10	4	1	0	129

1940.

	15-24	25-34	35-44	45-54	55-64	65+	Total
Males	79	58	30	19	9	0	195
Females	57	40	5	1	0	0	103

The majority of the patients admitted were as usual under 35 years of age. This applied to both men and women, with a higher percentage in the case of the women :—

		Males	Females.	
1939	....	60·36%	88·37%	} under 35 years.
1940	....	70·25%	94·17%	

The following is an analysis of the patients admitted according to their classification. The terms “T.B. Minus,” “T.B. Plus 1,” etc., have been substituted for “Class A,” “Class B1,” etc., as being of more general use.

1939.

		Males.	Females.	Total.
T.B. Minus	...	68	53	121
T.B. Plus 1	...	10	6	16
T.B. Plus 2	...	129	56	185
T.B. Plus 3	...	15	14	29
Total	...	222	129	351

1940.

		Males.	Females.	Total.
T.B. Minus	...	83	49	132
T.B. Plus 1	...	8	2	10
T.B. Plus 2	...	87	46	133
T.B. Plus 3	...	17	6	23
Total	...	195	103	298

From the above tables it is interesting to note that in 1940, while the number of male patients admitted was 27 less than the number admitted in 1939, yet the number classified T.B. Minus was actually 15 more more than in the preceding year, and the number classified T.B. Plus 2 was 42 less.

With regard to the discharges, the following tables give an analysis of the patients according to their classification and the results of treatment:—

1939.

	Quiescent	Improved	Un- changed	Worse	Died	Total
T.B. Minus	23	20	29	2	0	74
T.B. Plus 1	7	8	2	0	0	17
T.B. Plus 2	14	135	49	3	0	201
T.B. Plus 3	0	3	7	17	14	41
TOTAL	44	166	87	22	14	333

1940.

	Quiescent	Improved	Un- changed	Worse	Died	Total
T.B. Minus	34	36	15	1	1	87
T.B. Plus 1	10	2	1	0	0	13
T.B. Plus 2	24	81	31	7	2	145
T.B. Plus 3	0	1	14	22	12	49
TOTAL	68	120	61	30	15	294

Reference has already been made to the more suitable type of case coming here for treatment. This

is borne out in the above tables by the fact that in 1940 there were 24 more patients discharged "quiescent" than was the case in 1939 despite the fact that the total number of patients discharged was 39 less than in the previous year. It must also be noted, however, that of the patients discharged "worse" there were 8 more in 1940 than in 1939.

Length of Stay.

The following table sets forth the length of stay of the patients discharged :—

	1939.	1940.
Over 12 months	60	62
Between 9 and 12 months	24	36
Between 6 and 9 months	50	49
Between 3 and 6 months	75	62
Between 2 and 3 months	39	25
Between 1 and 2 months	44	36
Under 1 month	41	24
	<hr/> 333	<hr/> 294

Of the patients remaining for periods of less than 1 month 14 remained for 1 week or less in 1939 and 12 in 1940.

Gain and Loss of Weight.

The following figures do not include those patients who remained for 1 week or less. Also excluded are those who were too ill to be weighed and those who died :—

	1939.	1940.
Number of patients who gained	244	205
Number of patients who lost	24	28
Greatest gain in weight	36 lbs.	47 lbs.
Least gain in weight	1 lb.	$\frac{1}{2}$ lb.
Greatest loss in weight	16 lbs.	30 lbs.
Least loss in weight	1 lb.	1 lb.
Number remaining stationary....	18	11

Family History.

Under this heading only the figures for 1940 are to hand and they cover only those discharged during the year.

Positive	....	88	=	29·93%
Negative	....	192	=	65·30%
Indefinite	....	14	=	4·77%

Sputum on Admission and on Discharge.

Condition of Sputum	1939		1940	
Positive on admission ...	134	166 (=49·85%)	88	109 (=37·08%)
Positive on Discharge ...				
Negative on admission ...	32		21	
Positive on Discharge ...				
Negative on admission ...	71		105	
Negative on Discharge ...				
Positive on admission ...	56	167 (=50·15%)	51	185 (=62·92%)
Negative on discharge ...				
No sputum on admission	40		29	
No sputum on discharge				
Total ...	333		294	

Treatment.

The treatment carried out followed the lines adopted in previous years :—

Graduated Exercise.

Auto-inoculation produced by exercises of graded severity, balanced by rest, formed the basis of the general routine treatment. This treatment commences with the patient on “absolute rest in bed.” He is then allowed up for gradually increased periods until he is up all day. From then on the treatment takes the form of work of increasing severity ranging from light work in the wards to heavy gardening. The list

of patients on each Grade is revised weekly, the temperature, pulse rate, weight, etc., being considered before placing the patient on the next severer Grade.

Artificial Pneumothorax.

The steady increase in the number of patients suitable for this line of treatment was maintained in both 1939 and 1940. The following summarises the work carried out :—

	1939.	1940.
Number of patients treated	124	141
Number of inductions	57	50
Number of second inductions for bilateral selective collapse	3	3
Number of refills given	1,981	2,787
Number of aspirations with air re- placement	74	142
Number of patients induced elsewhere	24	31
Number of patients continuing else- where	38	44
Number of cases terminated due to (a) unsuitability	8	7
(b) inadequate collapse	14	14
Number of patients completing treatment	3	8

In addition to the above, induction was attempted on 23 patients in 1939 and on 30 patients in 1940, but without success.

The following table shows the increased application of treatment by artificial pneumothorax in this Sanatorium during the past 5 years :—

	1936	1937	1938	1939	1940
Number of patients treated	43	63	100	124	141
Number of inductions	27	25	45	57	50
Number of refills	691	798	1,893	1,981	2,787

Gold Therapy.

The administration of gold salts was continued, the salts being given intramuscularly in the form of Oleo-sanocrysin. The following is a summary of the work carried out :—

	1939.	1940.
Number of patients treated	90	95
Number of new cases	69	37
Number of courses commenced	112	97
Number of courses completed	93	89
Number of injections given	1,024	1,022
Number of cases discontinued due to		
(a) unsuitability	4	11
(b) leaving before completing one course	4	—
Number of patients leaving after completing		
(a) 1 course	4	28
(b) 2 courses	5	26
Number of patients completing treatment	15	18

During the course of treatment in 1939 reactions occurred in 8 cases and in 3 of them the treatment had to be abandoned. In 1940 reactions occurred in 19 cases, causing the termination of the treatment in 8. The reactions were as follow :—

	1939.	1940.
Albuminuria	3	10
Dermatitis	4	6
Diarrhoea	1	2
Stomatitis	0	1

Surgical Treatment.

We have again been indebted to the Surgeons of the General Hospitals in the City for their help in the treatment of certain cases by operative means. We have been all too restricted in the application of this

most important branch of treatment owing to our lack of adequate facilities. This handicap, however, is being overcome and its removal will enable us to carry out most of our own operative work. The following operations were performed :—

	1939.	1940.
Thoracoplasty	1	2
Phrenic Evulsion	5	2
Phrenic Crush	0	1
Thoracoscopy	1	4
Tube Drainage	1	0
Extrapleural Pneumothorax	0	1

Actinotherapy.

Ultra Violet Light was applied in the treatment of tuberculous adenitis, tuberculous peritonitis and tuberculous sinuses as well as in the treatment of various minor ailments. The general Mercury Vapour Lamp was used for all except the sinuses. For these local application was made by means of the Kromayer Lamp. In all instances the results were satisfactory. The following is a résumé of the work done :—

	1939.	1940.
Mercury Vapour Lamp	632 applications.	547
Kromayer Lamp	61 applications.	53

Insulin and Glucose.

The use of insulin and glucose as an aid to metabolism was applied to a limited number of patients. The patients were all confined to bed and the results were satisfactory in some but indefinite in others.

Tuberculin.

Tuberculin as an aid to fibrosis was employed in a few cases. The patients concerned did not appear to derive any material benefit.

Complications.

During the years under review a number of patients suffered from complications, tuberculous and otherwise. The following were the more important :—

Tuberculous—	1939.	1940.
Laryngitis	12	7
Pleurisy	3	8
Empyema	4	2
Broncho-pulmonary Fistula	0	1
Hip-joint	1	1
Knee-joint	2	1
Elbow-joint	1	0
Spine	3	2
Adenitis	2	3
Peritonitis	2	1
Enteritis	2	1
Meningitis	0	3
Lupus Vulgaris	1	0
Ischio-rectal Abscess	4	1
Chronic Bronchitis	6	5
Diabetes Mellitus	3	1
Myocarditis	0	3
Auricular Fibrillation	0	1

X-Ray Department.

	1939.	1940.
Number of Films taken	646	789
Number of Screen Examinations	1,114	1,370

Laboratory.

SPUTUM EXAMINATIONS.

	1939.	1940.
Number of Examinations	1,572	1,907
Number " Positive "	915	925
Number " Negative "	657	982

Direct examination was made in all instances, staining being by the usual Ziehl-Neelsen method.

BLOOD SEDIMENTATION RATE.

Routine examination of the blood sedimentation rate was commenced in the last three months of 1939 and was continued through 1940. Examination is made at monthly intervals, and the citrated blood is set up in the standard Westergren Tubes. In 1939 (three months) the number of examinations was 387, and in 1940 the number was 2,237.

Staff Changes.

In September, 1939, Dr. C. K. MacArdle commenced duty as Assistant Medical Officer. He was appointed in place of Dr. B. M. Dunlevy, who had resigned to take up another post.

The post of House Physician, a six-monthly appointment, was held in 1939 by Dr. Adeline McManus from January to June, and by Dr. James J. Campbell from July to December. In 1940 the post was held by Dr. Thomas O'Gorman from January to June, and by Dr. Michael Kehoe from July to December.

Patients' Retreat.

The annual three-day Retreat was held as usual. In 1939 it was directed by the Rev. Fr. Cussen, O.P., and in 1940 the director was the Rev. T. Counihan, S.J.

Amusements.

The annual home and away Billiards Matches with the patients of Peamount Sanatorium were held as usual, and several successful concerts were given, some organised by the patients themselves. Regular fortnightly cinema performances were started in 1939 and were greatly appreciated. So popular were these performances that the patients clubbed together and collected funds to provide performances during the alternate weeks.

ARTHUR J. WALSH,
R.M.S.

ANNUAL REPORT

CITY OF DUBLIN MATERNITY AND CHILD WELFARE SERVICE.

KERRY REDDIN,

Medical Officer for Maternity and Child Welfare.

Assistant Medical Officer of Health.

CARNEGIE WELFARE CENTRE,
LORD EDWARD STREET,
DUBLIN.

MATERNITY AND CHILD WELFARE SERVICE.

Notification of Births Act.

During the two years ended 31st December, 1940, 28,803 (14,581 in 1939 and 14,222 in 1940) were notified to the Public Health Department. The number of births relating to localities other than City was 4,912. The number relating to Dublin City was 23,891, of which number 1,182 were private cases not requiring visitation. 23,118 cases were visited by our Health Visitors.

Home Visiting.

The Health Visitors staff consists of 23 nurses, a Superintendent Nurse and a Deputy Superintendent Nurse.

The total number of domiciliary visits paid during the two years was 400,888 and there were 114,557 cases on the books.

A special course of lectures on Air Raid Precautions was given to the Health Visitors during the period.

Stillbirths.

This question has once more been investigated. There were 291 cases in the North City and 364 cases in the South City area. Of these numbers 90% had pre-natal care or had attention from their own private doctors.

During the year the following appliances were supplied for maternity cases, free through this Department :—

	1939	1940
Pregnancy Belts	9	10
Bandages for Varicose Veins	73	97
Special Elastic Stockings	17	23

The injection treatment for varicose veins in expectant mothers adopted by the Rotunda Hospital continues to prove its exceeding value.

Dental Treatment for Expectant or Nursing Mothers.

Additional dental service is urgently needed. With the increased demand for treatment from mothers, numbers of cases are referred to us by the Maternity Hospitals which has increased the volume of work to be done.

Three dental clinics are held weekly in the Centre, Lord Edward Street, each session lasting three hours. The number treated during the two years was 3,910 consisting of 8,842 mothers and children. 177 mothers got full sets of dentures, 124 got half-sets and 22 had dentures repaired, some paying cost price, some free, contributions being made in accordance with the income, number of children and rent. Cases requiring a large number of extractions or with abscess formation are referred to the Dental Hospital for anaesthetic, a small payment being made to the Hospital for this service. We have already noted that the Maternity Hospitals are now sending large numbers of mothers to us for dental treatment and dental extractions. The latter in no case would appear to have caused any trouble to the mother when pregnant. While admitting the high percentage of dental caries present in the Dublin mother a definite improvement is to be noted as a result of schools' medical inspection. Many of the mothers who received treatment as school children are now returning as expectant or nursing mothers for dental treatment here and in these cases there is a greater demand for Conservative treatment. For such cases extra dental service is urgently required.

Maternal Mortality.

In 1939 7,475 intern cases were delivered in the Hospitals with 44 deaths, a rate of 5·8 per 1,000. 3,831 district cases were attended by the staffs of these Hospitals with 3 deaths, a rate of 0·78 per 1,000 cases. In 1940 7,813 intern cases were delivered with 42 deaths, a rate of 5·3 per 1,000. Extern cases numbered 3,586, with 3 deaths, giving a rate of ·83 per 1,000 cases. Remembering the high percentage of

abnormal cases referred to the Hospitals the City definitely owes a debt of gratitude to the Masters, the Medical and Nursing Staffs of the three Maternity Hospitals for these results.

Infant Mortality.

The following is a table of Infant Mortality Rates for the period from 1930–1940 :—

Year.			
1930	...	98	Deaths per 1,000 Births.
1931	...	94	
1932	...	102	
1933	...	83	
1934	...	79	
1935	...	93	
1936	...	115	
1937	...	106	
1938	...	98	
1939	...	90	
1940	...	92	

In previous annual reports the high infant mortality rate has been noted with its concomitant causes, but it is to be regretted that very little progress has been made towards the much to be desired reduction.

There is, nevertheless, as will be seen from the figures for the past four years a very notable and welcome decrease in this vital mortality rate.

In other countries generous development of Child Welfare schemes would seem to have achieved good results. The City Welfare scheme is definitely understaffed both from a medical and health visitor's point of view. We would again point out the effect of strikes and economic stress, also of course of bad housing. There can be no doubt that infections play a large part not only through the agency of the notifiable diseases but through non-notifiable respiratory and alimentary infections.

In last year's report we gave an analysis of causative factors of the infant mortality rate in Dublin.

No. 1.—Failure in breast feeding due to :—

- A. Modern tendency to bottle-feed coupled with inability to breast feed.
- B. The fact that it is so much easier to “put a baby on the bottle” than to go through the tedious process of waiting for the breast milk to return to the breast after the tenth day is a large causative factor.

No. 2.—Malnutrition of mothers due to :—

- A. Lack of sufficient means to supply the diet necessary for the expectant mother due to economic stress, e.g., unemployment, strikes, etc.
- B. Wrong diets—ignorance on the mother’s part in selecting wrong foods.
- C. Lack of proper cooking facilities so often manifested in our Georgian slums.
- D. Ignorance of cooking methods due to the fact that for generations the people have not had proper facilities in their existent housing conditions.

Breast Feeding.

The survey carried out by the Health Visitors last year into the question of breast feeding has been continued. The following table shows the result of this survey carried out during 1939 :—

Area	Breast Fed	Partially Breast Fed	Artificially Fed	Total Mothers
North City ...	198	383	188	769
South City ...	215	279	286	780
TOTAL ...	413	662	474	1,549

From the above table it will be observed that only 26% of mothers breast fed their babies in 1939 as against 40% in 1938. We would point out that this enquiry extends over a period of one month's visits in each case and the results are very disheartening. In 1939 it will be observed that there has been a definite increase in the number of partially breast-fed babies, as also an increase in the number of those fed purely on the bottle. From enquiries made at the various nursing homes in the City we have only to confirm what we found last year, that in about 85% of cases the mothers fail to breast feed after three months save in the case of country patients. From careful enquiry and analysis of these results one is inclined to consider that this failure in breast feeding is due to some form of malnutrition or diet deficiency and to the increased pace of life but has no relation to housing conditions. An investigation was again carried out into the number of mothers who breast feed their babies. This gave almost exactly a similar result to what we found last year.

Distribution of Free Milk.

It is the duty of the Health Visitor of the District to recommend deserving cases for milk under the Free Milk Scheme. 2,695,990 pints of milk were so distributed in 1939 and 2,172,384 in 1940, the milk being of excellent quality. It is to be noted that the poorer people are becoming increasingly "Milk Conscious" as one is frequently asked by mothers to be permitted to purchase the good quality milk as supplied by the Infant Aid Society. We may also take this opportunity of complimenting the Society for what they have done in distributing in the City the excellent milk supply made available under the Free Milk Scheme, which they administer on behalf of the Dublin Corporation.

Welfare Clinics.

Thirteen Welfare Clinics are held weekly in the City at different centres, usually in slum areas. Mothers, pre-natal and post-natal are seen and advised as well as infants and children up to five years of age. Defects discovered are dealt with by recommending the case to the Special Department of the different Hospitals. When prescribed by the Hospitals orthopaedic appliances, glasses for squints, belts, trusses and bandages for varicose veins are issued through the local Welfare Centre under the scheme. During the year under review appliances to the number of 530 were supplied. These included boots, trusses, maternity belts, etc. A short talk is given at each clinic by one of the Health Visitors. This talk is on some subject of mother-craft. Experience shows that the mothers are availing of this service in a much better way than they used formerly. A Medical Officer is in attendance at each of these clinics to assist and advise. The clinic in the Pembroke district is held in the open air during the summer months. In July 1939 a new combined Welfare Clinic and Dining Hall was opened on the North side of the City at St. Joseph's Mansions, Killarney Street. This is unique in that it is actually built into a block of flats and serves a very dense slum area.

Medical Consultations.

		Mothers		Children
		Pre-Natal	Post-Natal	
1939	...	8,566	5,907	27,559
1940	...	9,243	6,173	27,687

Gross Attendances.

		Mothers	Infants and Children
1939	...	32,315	45,101
1940	...	44,657	45,639

Re-Examination Clinics.

Owing to the large number of cases to be dealt with at the ordinary Welfare Clinics it is quite impossible to examine children there in detail who may require it. A special clinic is held weekly on Saturday morning at the Carnegie Centre, Lord Edward Street, for such cases. Many cases of early lung and gland tuberculosis were thus detected. Total number of cases examined during the period under review 2,450.

Convalescent Home Treatment.

Mothers requiring convalescent treatment were sent to Linden Convalescent Home, Stillorgan, also to Beaumont Convalescent Home. Children under five years of age were sent to Cheeverstown. We would particularly thank the matrons and staffs of these homes for their kindness to the mothers and children we sent them.

Crèches.

There are three crèches in the City, at Meath Street, Henrietta Street and Rathmines, the largest being the Meath Street crèche. These take care of the pre-school children only for the day while the mothers are at work. A small nominal daily charge is made. It is to be hoped that in the immediate future a nursery school will be started in Dublin to be associated with a large building scheme. During the year these crèches have been frequently inspected by the Medical Officer and visited by the Health Visitors.

Homes for Unmarried Mothers.

Many visits of inspection have been paid by the Medical Officer during the year to the Regina Coeli Hostel, North Brunswick Street. There is a large number of unmarried mothers and babies in the Hostel which is administered by the Sisters of the Legion of Mary.

Magdalen Asylum.

This Institution which is a home for unmarried mothers and babies under the auspices of the Church of Ireland was visited several times during the year by the Medical Officer and found very satisfactory.

Unmarried Mothers.

These mothers are visited in the ordinary way on the district by the Health Visitors and have available all the services that are provided for other mothers. Their records are kept in the same way as in the case of married women and they are addressed as married women in the clinics.

Pre-Natal and Post-Natal care of the Mother.

The care of the expectant and nursing mother continues to progress with satisfactory results. Some years ago the pre-natal Departments of the Maternity Hospitals were poorly attended, mainly because of the lack of sufficient accommodation in the out-patients' department and ignorance on the part of the mother, in not realizing that pre-natal care was necessary. For the last three or four years there has been a well-sustained improvement in the number of mothers attending the Hospitals before confinement. Unquestionably this increase has been largely due to propaganda and advice given by the City Health Visitors and at the clinics held under the scheme, as also to the improved conditions in the out-patients' departments of the Hospitals.

The provision of extra nourishment for necessitous expectant and nursing mothers coming under the scheme continues as in previous years to be carried out by the Welfare Department of the St. John Ambulance Brigade to whom the City Authorities make an annual grant. The value of the work done

must be seen to be appreciated. The following figures submitted by this Department will give an idea of the work done :—

**St. John Ambulance Brigade—Welfare Department.
Diningroom.**

	1939	1940
Number of dinners served	77,403	70,230
Pints of soup issued	85,611½	84,238
Total cost	£2,140	£2,082
Cost per dinner (average)	6d.	
Number of women admitted during year	810	634
Number of cases helped during year	1,096	

Maternity Grants.

Number of confinements	670	596
Twin births	7	9
Stillbirths, or early deaths	49	37
Number of oatmeal parcels issued	662 cost £33 2 0	588 costing £29 5 0
Number of chemises issued	1,324	
Number of baby parcels	613 cost £199 4 6	554 costing £204 0 6
Number of pints of milk distributed at request of Public Health Authorities and paid for by Child Wel- fare Committee	9,248	£81 9 0
Visits paid	670	} 654
Interviews	697	

A large number of garments, both old and new were received from the Central Workroom and distributed in the Diningroom.

ST. JOHN AMBULANCE BRIGADE IN IRELAND.

WELFARE DEPARTMENT.

SUMMMARY OF AUDITED RECEIPTS AND PAYMENTS ACCOUNT FOR YEAR ENDING
31st MARCH, 1941.

To	RECEIPTS.	BY			PAYMENTS.			£ s. d.		
		DINNERS.			Food ...			£ s. d.		
Public Health Authorities	1,600	0	0	...	1,062	13	8	
Joint Red Cross Committee	150	0	0	...	400	0	4	
St. John Ambulance Brigade	100	0	0	...	715	2	2	
Sale of Work	200	0	0					2,177 16 2
Subscriptions	3	10	0					18 13 0
Bank interest	0	12	10					2,196 9 2
			2,054	2	10					
Cash on hands at beginning	2	10	4					128 3 8
Bank balance at end	270	11	8					2 12 0
			£2,327	4	10					£2,327 4 10

N.B.—The Public Health Grant goes entirely against the cost of the Dinners.
The difference between the Child Welfare Refund and the Milk Account adjusts itself in the next month's Account.

It would be well, I think, at this point to explain how a destitute mother comes to receive these benefits. She is encountered on the District by the Health Visitor or in the clinic by the Medical Officer. She is given a card to be signed by the Maternity Hospital she wishes to attend. On the back of this card are spaces to be filled in by the Hospital Authorities giving the date of her expected confinement and stating whether further attendances at the Maternity Hospital are necessary, also whether the mother suffers from blood pressure or albuminuria. She returns this card to the Medical Officer at the Local Welfare Clinic at her next visit whence she is then referred to the Welfare Department of the Brigade as requiring dinners or special milk diet if albuminuria is present. On attending in the Dining Hall she obtains a daily meal for three months before and three months after her confinement. She also receives 2 sets of baby clothes and underclothes for herself. A special order is also given to her for an issue of oatmeal to make gruel and a daily ration of one pint of milk for the fortnight after her confinement is over. The daily meal consists of a diet rich in vitamin content and has been specially chosen and arranged by Professor Fearon, T.C.D., whose kindness must be here acknowledged. With the daily meal each mother is induced to drink half a pint of good quality milk.

While realising in every way the importance of developing pre-natal care to the highest degree, one must always bear in mind the possible danger of making of motherhood a pathological instead of a normal physiological process. Every care is taken to prevent this at the Welfare Clinics and through the Home Visitation of the Welfare Nursing Staff. Comment must also be made on the increasingly large numbers of primipara availing of the facilities. It should be emphasised that as the primary objects of a Maternity and Child Welfare Scheme are the reduction of Maternal and Infantile Mortality post-natal care is of equal importance to pre-natal care.

During the year under review all mothers encountered by either the Health Visitor on the district or the Medical Officer in the Clinics where the "history" suggested that expert treatment was required were referred to the Gynæcological Department of their own Maternity Hospital or to the Gynæcological Department of a General Hospital. In this way it has been possible to prevent many miscarriages and also many neo-natal deaths as well as many chronic gynæcological invalids.

Pre-Natal cases seen and Attendances at City Maternity Hospitals during the Year.

Hospital	Cases		Attendances	
	1939	1940	1939	1940
Coombe ...	1,944	1,965	4,794	5,119
Holles Street	3,179	3,202	9,403	12,540
Rotunda ...	3,396	6,183	38,951	34,803
Total ...	8,519	11,350	53,148	52,462

It is interesting to compare those figures with the same figures for 1928 when 925 cases received pre-natal care with about 3,000 attendances.

Rickets and Orthopaedic deformities.

Gross deformities due to rickets have become rarer and in this opinion we are supported by many of our Orthopaedic Surgeons. One rarely now sees a very badly deformed child under ten years of age. Under the Maternity and Child Welfare Scheme early ricket cases have been treated by:—

- (a) Ultra Violet Therapy and Massage at the Centre, Lord Edward Street, or in some of the Children's Hospitals.
- (b) Open-air treatment in the Sunshine Home, Stillorgan. This latter treatment has proved very successful, but unfortunately there is a great necessity for further bed accommodation in the future.

Gross deformities due to rickets are referred to the Orthopædic Hospital and the various Orthopædic Departments of the City Hospitals. During the two years 72 cases were sent to the Orthopædic Hospital, 118 to the Children's Sunshine Home, Stillorgan and 103 cases were referred to the Orthopædic Departments of the City Hospitals. 276 Orthopædic appliances were supplied. Deformities due to conditions other than rickets were similarly referred and dealt with accordingly.

Ultra-Violet Light Clinics.

Ultra-violet light therapy has definitely come to have a place in all Child Welfare schemes. It is of value particularly in cases of malnutrition and rickets. At the ultra-violet light clinic, it is necessary to have two nurses in attendance—one to supervise the application of the treatment and one for the weekly weighing and assistance in the dressing and undressing of the babies. Enlarged glands and many cases of suspected tubercular abdomen were treated with very satisfactory results. No case of suspected tubercular origin or where the parents were tubercular is given treatment until subjected to the Skin Tests or X-Ray. For these tests and X-Rays, we must acknowledge the co-operation of the staffs of St. Ultan's and the other Hospitals. Any case losing weight while under treatment is re-investigated. We would point out that in administering the Ultra-Violet Light Department the Medical Officer requires to check and supervise all treatments given very frequently. The attendances during 1939 and 1940 were 5,641 and 5,964 respectively and no difficulty was experienced in securing regularity in the treatment as the mothers are universally convinced of its value.

Co-operation between the different Maternity Hospitals, St. Ultan's Hospital and the officers operating the Maternity and Child Welfare scheme could not be any closer or any more satisfactory than at present. The Hospitals furnish this Department with

lists of weak or delicate babies leaving Hospital together with the special diets required, and the Health Visitors visit the homes to supervise the preparation and application of the Hospital requirements. Where necessary the Health Visitor refers the case back to Hospital for extension of intern or extern treatment. The following is a list of the cases referred by the different Hospitals to this Department :—

Hospital				Number of Cases	
				1939	1940
St. Ultan's	...	...	...	260	186
Orthopædic	...	...	...	10	26
National Maternity	...	...	...	10	40
Rotunda	...	...	...	40	120
Coombe	...	...	...	2	34
National Children's	...	...	...	1	4
Total				323	410

Diphtheria Immunization Clinics.

A session is held once weekly at nine of the different Welfare Clinics held throughout the City. It is to be regretted that these facilities which afford such permanent results are not more popular and that there is still much apathy amongst the public. The number of children immunized during the two years ended 31st December, 1940, is referred to in another part of this Report.

Principal Epidemic Diseases causing death in children up to 5 years of age.

		1937	1938	1939	1940
Diarrhoeal diseases	...	242	210	209	233
Diphtheria	...	47	44	45	31
Measles	...	43	36	51	23
Whooping Cough	...	72	33	26	68
Scarlet Fever	...	13	16	3	5

From the above it will be seen that Diphtheria and Diarrhoea, Measles and Whooping Cough have taken the largest toll resulting in 694 deaths for the period. A further grave record is the number of children under one year of age who died in the same period from premature birth and from pneumonia. Cases of Whooping Cough encountered "on the district" or in the Clinics are referred to the Out-Patients' Department of St. Ultan's where prophylactic and therapeutic injections are given. 4,429 children were so treated, special days being allotted for this treatment. Medical opinion states that therapeutic injections are particularly successful in reducing the "period of Whooping" and also the number of cases of pneumonia.

We must acknowledge the co-operation in every way of St. Ultan's Hospital without which undoubtedly many more babies would have died. We again thank them for the many Skin Tests and X-Ray examinations carried out. 31,311 babies from the City were seen at the Extern Department during the year. One would wish that more cots for sick babies could be made available.

We also wish to thank particularly the medical staff Harcourt Street Children's Hospital and Temple Street for their very kind assistance and help.

Children under five years of age.

Malnutrition so frequently encountered in older children is not quite so common in the child under five, perhaps because the family efforts are devoted to the younger child. There are, nevertheless, many cases of malnutrition and such are referred to Cheevers-town Convalescent Home, as we have previously stated, and to whose Matron, Staff and Committee we return sincere thanks for their many kindnesses and the facilities they afforded. It is a condition of

admission to the Home that children must be immunized against Diphtheria and free from any contagious disease.

Tubercular Children and Contacts.

Tubercular cases met with are referred to the Municipal Tuberculosis Dispensary and children of tubercular parents are advised to attend there for special examination. We must thank the staff at Charles Street Dispensary for the great trouble they took in sending us so many written reports on cases.

Care of Foster Children.

All boarded-out children are visited by the Health Visitors, lists of the cases being forwarded by the Dublin Union to this Department where they are filed and recorded as in the case of other children. When the children have reached five years of age, their records are sent back to the Dublin Union. The Welfare Clinics are also open to them, and all facilities are available as for ordinary children.

National Society for Prevention of Cruelty to Children.

We must acknowledge the help and co-operation given by the National Society for Prevention of Cruelty to Children in cases where parents were lax or refused to allow treatments to be carried out. Many cases have been referred by the Inspectors to the Clinics where appropriate treatment was given.

Voluntary Workers.

Tribute must be paid to the very valuable services rendered by the Voluntary Workers of the Infant Aid Society and Babies' Clubs' Committee.

Jubilee Nurses.

We would especially acknowledge the help and co-operation received from the Jubilee Nurses' Association who attended 487 cases at our request during the two years in the homes, dressing dirty heads, breast abscesses, etc. The number of visits paid in connection with these cases was 3,434.

Finally, we would pay a tribute to the Maternity Hospitals, the Children's Hospitals and the various special Departments of the General Hospitals for all the help given.

REPORT OF THE BABIES' CLUBS COMMITTEE.

During the period ended 31st December, 1940, the total attendances of Mothers, Infants, Children were 125,249.

The distribution of Nutrients—Cod Liver Oil, Carragol Emulsion, Parrish's Food, etc., is carried out by a voluntary Committee attached to each Club. Necessitous cases are supplied free, and others at half price and cost, as directed by the Medical Officer. Dried Milk—Cow and Gate, Ostermilk, Trufood, etc., is supplied at the Clubs in the same way.

Lectures are given to the mothers by a Health Visitor at each Clinic.

The Dental Fund is considered a great benefit to mothers, as by paying a small amount weekly they are able to save the cost of dentures in a short time. In this way 251 mothers saved £138 13s. 0d. during the year, and were supplied with dentures. In certain cases dentures are supplied free.

The Clubs' activities are reported as follows :—

St. Andrew's Club. At Christmas 96 members of this Club received hampers containing tea, sugar, etc., free clothing and 24 bags of turf being also distributed to necessitous cases.

Babies' and children's garments are, on the advice of the nurses, given to members attending the Club. Cookery, Sewing and Drawing Classes are held weekly.

The Committee regret very much that owing to lack of funds, they have had to abandon their Country Air Holiday Scheme, and that for the same reason the usual Christmas Party for mothers and children attending the club could not be given this year.

Sláinte Club. Free clothing is distributed weekly to members of this Club, and Free Coal and Food are given to necessitous cases. Mothers and Children are sent to a Holiday Home at Malahide which is maintained by this Committee, and members of the Committee visit it periodically, from June to September, when the Club members are in occupation. A Day excursion to Gormanstown is given to all members and children, where Folk Dancing, a Fête and Tea Party takes place.

St. Monica's Club. In January, 1939, a party was given at the Rotunda Rooms for the mothers and dancing children—144 in all—of which a substantial tea was given, and 30 mothers received prizes for good attendance at the Club. Four mothers and children were sent away for a fortnight's holiday. All Club members were given a day's outing to Gormanstown in August. In common with most other Clubs, tea was provided for mothers and children at the Fête held at Lord Iveagh's Grounds in June. Dinner tickets were given to deserving cases in November and December, while Food Orders were given to several cases during the year on the recommendation of the nurses. Extra food orders were given at Christmas, together with 84 bags of coal, one for each regular attender. A thrift fund is kept at the Club, by means of which mothers save small sums weekly. Clothing is given free to certain necessitous cases on the advice of the nurses. Clothes are also sold at a low price to mothers, the money received as well as the profits on all knitted goods sold goes to the fund for the welfare of the mothers.

Gordon Club. A Thrift account is kept for mothers and a Summer outing provided for all members to Gormanstown. Fourteen tons of coal were distributed to necessitous cases.

Our Lady of Lourdes Club. There was a very large attendance at Club from May to the end of September. The Country Cottage at Swords was open, and each fortnight during that period a family was sent there, all benefiting by the change. Five tons of coal were distributed to Club members at Christmas.

St. Patrick's Club. The Annual Folk Dance Festival was held. We distributed 10 tons of coal, 100 lbs. sugar, 100 packets tea, free. Clothing was given to necessitous cases, and pantomime tickets given to children.

St. Laurence O'Toole's Club. The annual outing for members took place in June, all members enjoyed a day at Killiney, where tea was supplied, and gifts of fruit and confectionery given to each mother. Refreshments were provided for all members taking part in the Folk Dancing Festival. At Christmas 20 parcels of clothing and groceries were given to the most deserving members of the Club.

**Total Attendances at Nine Babies' Clubs, 1st January to 31st
December, 1939.**

SOUTH CITY	Mothers	Infants	Children
St. Andrew's Club, 10 Lower Mount Street	1,768	841	886
St. Brigid's Club, Keogh Square, Inchicore	2,318	1,053	1,640
Gordon Club, 48, The Coombe	3,740	1,589	2,695
St. Monica's Club, Carnegie Centre	4,444	2,290	2,266
St. Patrick's Club, Carnegie Centre	1,716	1,039	1,182
NORTH CITY.			
St. Anthony's Club, Temple Street Hospital	3,004	1,209	1,800
St. Laurence O'Toole's Club, Aldborough House ...	2,011	1,242	744
Our Lady of Lourdes Club, Aldborough House ...	2,421	1,204	1,019
Sláinte Club, 6 Blackhall Street	3,870	1,931	1,127
TOTAL ...	25,292	12,398	13,359

Total Attendances at Nine Babies' Clubs during 1940.

SOUTH CITY	Mothers	Infants	Children
St. Andrew's Club	2,078	1,233	989
St. Brigid's Club	3,674	1,774	2,107
Gordon Club	5,484	1,787	3,813
St. Monica's Club	5,837	3,030	2,532
St. Patrick's Club	2,966	1,900	1,803
NORTH CITY.			
St. Anthony's Club	4,344	1,959	2,699
St. Laurence O'Toole's Club	4,032	2,714	1,159
Our Lady of Lourdes Club ...	4,743	1,833	1,260
Sláinte Club	4,815	2,170	1,463
TOTAL ...	37,973	18,400	17,825

ADMINISTRATION OF NATIONAL FREE MILK SUPPLY SCHEME IN THE COUNTY BOROUGH OF DUBLIN.

Infant Aid Society's Activities.

This Report of the Infant Aid Society for the two years ending 31st December, 1940, records the Society's activities on behalf of necessitous families in the County Borough of Dublin

Through the operation of the Government's National Free Milk Supply Scheme the Corporation provided a sum of £30,000 annually for milk supplies which were distributed through the Infant Aid Society.

During the two years 5,190,666 pint bottles of milk were distributed in respect of children under five years of age whose parents were unable from their resources to provide them with adequate nourishment. As a result of increased unemployment in the City the Society had to cope with a greater number of applications for milk allowances than in previous years which made the task of administration more difficult. Families that hitherto were not obliged to seek relief from the Society came within the scope of the Free Milk Scheme during the past year on account of slackness of trade brought about by war conditions. Despite these reflections it is satisfactory to note that as far as possible all necessitous cases were helped, and the Scheme was administered to the best possible advantage.

It is of interest to note how the Milk Grant—£30,000—was spent during each financial year.

FREE MILK SCHEME, 1938/39.

EXPENDITURE :			£	s.	d.
Milk ...	...	...	27,819	11	5
Depot Attendants' Wages			1,456	0	7
Depot Expenses		...	689	14	9
			<hr/>		
			£29,965	6	9
Unexpended ...		...	34	13	3
			<hr/>		
			£30,000	0	0
			<hr/>		

FREE MILK SCHEME 1939/40.

EXPENDITURE :			£	s.	d.
Milk ...	...	...	27,577	15	8
Depot Attendants' Wages,					
etc.	...	...	1,531	10	0
Depot Expenses		...	853	17	10
			<hr/>		
			£29,963	3	6
Unexpended ...		...	36	16	6
			<hr/>		
			£30,000	0	0
			<hr/>		

MILK DISTRIBUTION.

The most important activity of the Society is the daily distribution of milk, which goes on throughout the year. During the past two years 5,190,666 pint bottles of milk were distributed for the benefit of children under five years of age whose parents were unable from their resources to provide them with supplies of milk. This daily distribution was carried

out from 29 depots each situated in a district convenient to the homes in the thickly populated areas. A new depot was opened in December at Sperrin Road, North Crumlin, to facilitate the milk recipients who had been transferred to the new houses in that district. Many families who moved to Kilworth Road, Carrow Road, etc., were obliged to go as far as Kehoe Square depot for their milk prior to the opening of the new depot, so it may be well imagined that the depot proved a great boon to the people in the neighbourhood.

The depot formerly at 68 North King Street was transferred to Assisi House, 30 Lower Church Street, by arrangement with the St. Vincent de Paul Society, and it is hoped that an economy may shortly be effected by closing the depot at Queen Street and serving the two areas from Assisi House.

As many as 7,110 pint bottles of milk were distributed daily from the depots during the two years, which number included about 400 bottles sold daily at cost price to families where the husbands obtained employment and the mothers were anxious to continue to give the best quality milk to their children.

The Depot Attendants who handle the milk distribution each morning between the hours of 8.30 and 10.30 a.m. are to be congratulated on their efficiency, and on the successful manner with which they deal with the hundreds of women and children who collect their milk from the depots. Their kindness and sympathy with the people is appreciated by the Committee who realise that their daily task is a very onerous one.

CORPORATION OF DUBLIN

ANNUAL REPORT

ON THE

SCHOOL MEDICAL SERVICE

BY

CATHERINE M. O'BRIEN, M.B., D.P.H., B.Sc., P.H.

SCHOOL MEDICAL SERVICE.**REPORT BY**

CATHERINE M. O'BRIEN, M.B., D.P.H., B.SC.P.H.,
Chief School Medical Officer., Asst. M.O.H.

This Service looks after the health and physical condition of those children who reside in the County Borough of Dublin and attend National Schools situated within the Borough boundary. Considerable attention is devoted to the finding of defects and their remedying. The main object of the Service is, however, the preservation of the health of the school child. The Scheme was primarily established to keep all children fit and well and to ensure that they leave school with a sound knowledge of healthy living.

The School Medical Service officially owes its existence in England to an Act of Parliament dated 1907 which, among other things, imposed upon Education Authorities the duty of providing Medical Inspection of Elementary School Children. Twelve years later the Public Health (Medical Treatment of Children) (Ireland) Act, 1919, provided for our School Medical Service in this country. On the second of January, 1928, the Act was first implemented in Dublin City, the Capital being one of the first of the Local Authorities to prepare a Scheme for the care of its school-going population. When the city boundary was extended in 1930 to include the Urban Districts of Pembroke, Rathmines and Rathgar, as well as certain rural areas in North and South Dublin, the School Medical Service was made available for these added areas.

The Scheme provides for the Care and Treatment of certain defects found in the course of School Medical Inspection—Eye, Ear, Nose and Throat, Teeth. In addition, facilities are now provided for the treatment

of Skin Affections, Orthopaedic conditions, and Cleft Palate. Tuberculosis (Pulmonary and Non Pulmonary) as well as V.D. conditions are referred to the appropriate Municipal Treatment Centres. Conditions other than these are served by the existing Health services.

The two whole-time permanent Dentists appointed to the Staff of this Department, took up duty in the Spring of 1939. A preliminary review of the school children's teeth was first made, and a treatment system in accordance with "booked appointments" set up. Fillings, dressings, scalings, etc., as well as extraction of carious teeth under local anaesthesia, are undertaken daily in the Dental Clinics, Lord Edward Street. The afternoon sessions soon came to be particularly well patronised. It is easier for the school-going child and its accompanying parent or guardian to attend after school hours. Appointments for Saturday morning are also in great demand.

In this connection I have to pay special tribute to those teachers who allow children in need of treatment to be out of school during the mornings, and who encourage children to attend until the treatment is completed. Such absences tend, unfortunately, to disturb school routine but the teachers are so genuinely interested in the welfare of their pupils that they welcome the benefits of a School Medical Service, rather than carp at the inconvenience and interruptions associated inevitably with such Scheme. This example and practical interest shown to parents as well as to the new generation is a factor of far-reaching importance and contributes in no small way to the health of the future. The teachers so earnestly and so wholeheartedly exert themselves on behalf of the children that one cannot fail to be impressed by their selflessness and patience and zeal.

It is perhaps almost too difficult for the mother of a large young family to be impressed by such apparently

remote matters as Preventive Medicine. The too often unequal task of balancing the family budget must absorb most of her time and attention. The sympathetic encouragement of her children's teacher does, however, prevail in the long run, and the harassed mother finally takes heart and decides to accept "School Medical" treatment for her children's defects. The teachers have our sincere admiration. Only posterity will know the value of their work. It would be deplorable, however, if parents came to shelve, even unconsciously, their responsibilities towards their children.

The Hospital Almoners, too, deserve only of the best. To them as well as to the teachers we return our thanks. They encourage regular attendance—and this is especially necessary in the case of intractable disease, *e.g.* Trachoma. They help to supervise the shirkers; they check up on the truants whose school absence may not in fact be due to Hospital attendance; they serve to link up school, home and Public Health, and thus contribute to the efficacy and smooth-running of a School Medical Service Scheme. The excellence of an Almoner's work has already been stressed in an earlier report of this department. Their training in Ireland is especially important coming into such close contact as they subsequently will, with the practical working of our own Public Health Service, the educational system of this country, and the lives of our people.

Dental Treatment.—The new School Dental Clinics with their modern equipment are pleasant and attractive, and the Service has proved to be extremely popular. One day, we hope, people will show that they recognise the worth of sound teeth, in their dietary and hygiene, as well as in their systematic visits to the Dentist at regular intervals. A Table at the end of this report shows the volume of work done here and in the Dental Hospital bi-weekly

sessions as well as in the once weekly session in Terenure Dispensary. Facilities for extraction of National School Children's teeth under general anaesthesia in the City Hospitals were discontinued early in 1939. I wish to thank the Dentists and these Hospitals sincerely for the excellent work done, more especially those Dentists who referred back to our Department, children whose teeth needed filling. To those Hospitals which provided a Children's Anaesthetist and Modern Anaesthesia specially suitable for children we offer our deep thanks. It is now considered that the 1929 standard (Board of Education, England) of one Dentist to every 5,000 Urban school children is too low, and the recommended provision is one whole-time Dentist for the supervision and treatment of every 1,500 Urban Elementary school children. We look forward to the day when such an arrangement may, too, be feasible.

Mental Defect.—The year 1939 saw the completion in Dublin, of an Investigation into the Incidence of Mental Deficiency, carried out by Dr. Louis Clifford in a group of North City National Schools, under the auspices of the Hospitals Commission. A valuable Report of this survey was read before the Statistical and Social Enquiry of Ireland. The importance of such an investigation with its far-reaching results, cannot be over-estimated, more especially in the light of present-day conditions—incidence of child crime, treatment of juvenile delinquents, court committals for repeated failure to comply with requirements of Compulsory Education Act, etc. The Mental Deficiency Acts, 1913-27, do not apply to this country, nor does the Education Act of 1921 with its provision for Compulsory Cleanliness Inspections in Elementary Schools, and the establishment of Special Schools, day and residential.

Dr. Clifford states in his report “it is unlikely (the odds are about 20 to 1 against), that the number of

mentally deficient children other than infants in Dublin City is greater than 1,200, or less than 650.” An estimate such as this might well give one to consider the pressing question of Care, Supervision and Control, and within certain limits, the education of these unfortunate children.

The members of the School Nursing Staff of this department assisted in the Mental Deficiency Investigation and their special knowledge of the schools and home conditions together with their training and experience of children proved most helpful.

One must not forget that schools for Defectives would provide also for that class of child whose wrong-doing is due to defective intellect rather than criminality. This fact alone would justify the establishment of such schools.

Research (b).—Children suffering from Night Blindness were referred for investigation and treatment to the Medical Research Council’s workers during the past year. Under Urban conditions, of course, Night Blindness may not be detected unless a compulsory deprivation of lighting after nightfall brings the defect to the sufferer’s notice.

Research (c).—The report of the Medical Research Council’s Enquiry into Juvenile Rheumatism was published towards the end of 1939. Children attending Dublin City and County National Schools constituted a large proportion of the material. The conclusions of the British Medical Research Council and of the Sub-Committee appointed by the B.M.A. were, that rheumatism is not a disease of the poorest, but rather of the better-off working classes; they provide little support to the conclusions of Glover and Dobbie “that rheumatism is the manifestation of poverty in the homes.”

Conditions during the past two years.—The increase in the school population of our city, which coincided with the opening weeks of the Autumn term, has continued up to date. Children resident in danger-zones in England were received into the homes of their Dublin relatives and admitted to the schools. Some of these children had previously attended schools in Central Europe. Nor had they altogether escaped the ill-effects of the time.

Enuresis does not appear to be decreasing, more especially in the 9-10 year old group of children who, apparently, have not succeeded in adjusting themselves in accordance with their promotion from the Infants' School. Overcrowding in the schools and homes; anxiety and insecurity, a long school day with afternoon dinner, insufficient and unsuitable food, air, sleep and rest—the constant noise, the cinema—"relaxation,"—thriller—all these do not make for good health in the growing child.

A.R.P.—Two members of the Nursing Staff attended the full course for Nurses in Griffith Barracks in the Spring. The Medical, Dental, Nursing and Clerical Staff attended the special course given in the School Medical Department in June. The Assistant School Medical Officers were subsequently required to act as temporary M.O. during a period of 94 days in another Department of the County Borough Public Health Service.

School Premises.—The schools built to accommodate the boys and girls of families migrated to Crumlin have been opened. These schools are situated outside the city boundary. A Secondary School to take about 100 boys over 12 years, was also opened and many of the parents were glad of the opportunity offered by this school. Meantime schools are required for the children in North Crumlin, Ellenfield and Larkhill. The Cabra West Housing Scheme will also necessitate

accessible schools. A table at the end of this report shows the progress made in school building. I wish to thank sincerely the Education Department for their unfailing courtesy.

Schools are an indispensable feature of Housing Schemes. Migration to the city outskirts with all that it gives of improved health is rather undone if the children must return to their old haunts for education, apart altogether from the fatiguing journey on foot or by 'bus. The infants too have to await the Seniors for the homeward journey—the compensation being the milk and bun provided to children in the city schools and much appreciated. When one hears complaints of falling averages in the city schools because of the movement to the suburbs, one wonders sometimes where in fact those children fitted, because there does not appear to be much extra space available in some of the school rooms “depleted” by migration to the suburbs.

It is not easy to acquire a suitable site when planning city schools convenient to the new flat dwellings—with free access of light and air, sufficiently far removed from adjoining tall buildings. Roof playgrounds adequately drained and suitably surfaced help to solve the space problem. Modern window cleaning methods serve against dust and smoke, while noise proof partitions and present-day road surfaces assist in reducing sound. Hygienic schools in the centre of the city cannot be built without considerable expense. They possess, however, that great advantage that the children could go home at midday to share the family dinner and return in time for afternoon school and recreation. The milk in school could then be given at the mid-morning interval. The fatigue of two long journeys daily without dinner at the normal hour is not desirable for young children.

Schools situated near the City Swimming Baths have the added advantage that the children may one

day be taken there for swimming as a beneficial and enjoyable feature of their education. Appropriate facilities, free to all, for physical training as well as gardening, nature study, cooking and sewing might well be available in every school, city as well as suburban.

Nutrition.—Poverty and disease are allied by the closest bond. Unemployment with reference to malnutrition has been investigated by the Special Committee of the Council of the B.M.A. established to determine the minimum weekly expenditure on foodstuffs which must be incurred by families of varying size if health and working capacity are to be maintained. Their report states “Man’s health or ill-health is dependent upon nutrition, exposure to infection and condition of environment. Children may grow up healthy in spite of a bad material environment, they may survive, undamaged, illnesses resulting from invasion by pathogenic micro-organisms but they cannot survive unscathed prolonged deprivation or deficiencies of certain essentials for normal nutrition.” In a school visited, of 45 children undergoing routine Medical Inspection, 22 were found to be suffering from malnutrition. These were the children of unemployed parents.

The Country Holiday Scheme for Irish speaking children with its possible adaptation as an Open Air Residential School during the Summer Term, might well be extended to admit those city children found to be in particular need of the benefits of good surroundings, quiet, and wholesome food.

Commentary.—During the course of one’s work with children, there are inevitably some general impressions obtained apart altogether from the statistics which give accurate data of the conditions found. The increased incidence of External Eye Diseases, more especially Phlyctenular condition and Corneal Ulcer is not good—the association of this latter and Tuberculosis is of

course now generally recognised. Discharging ears, too, that disease of the poor, are still far too frequent. The tragedy of deafness in childhood with all that it implies of ineducability, incapacity and loneliness must be prevented. Nor has the number of Physical Defectives (cripple children) declined, especially those conditions which follow on Ant. Poliomyelitis.

Treatment.—It is regretted that parents are not more eager to accept the treatment offered to them and that they too frequently postpone the remedying of defects. The practice of *selecting* treatment too is a handicap to the child. Sore eyes and discharging ears will resist treatment if the child's bad teeth are neglected.

Follow up work was carried out as usual by the School Nursing Staff; 10,302 cases received attention.

I tender sincere thanks to the Reverend Managers of the schools, and to the teachers. Those voluntary organisations whose generous help has always been forthcoming, I cannot sufficiently praise.

The members of the Medical, Dental, Nursing and Clerical Staff of our Department, I cordially thank.

ERECTION, RECONSTRUCTION, ETC., OF NATIONAL SCHOOL BUILDINGS PROCEEDING OR CARRIED OUT IN DUBLIN CITY DURING THE YEAR.

Crumlin Convent and Convent Infants.—The erection of these new schools, to provide educational facilities in connection with the new housing schemes in the Kimmage-Crumlin district, has been completed. The schools, which accommodate 1,000 girls and 1,024 infants, came into operation on 3rd July, 1939.

Crumlin Christian Brothers'.—This new school, which also caters for the educational needs of the new housing areas in the Kimmage-Crumlin district, was completed, and came into operation on 14th July, 1939. Accommodation is provided in the school for 928 boys.

King's Inns' Street Convent.—An extensive reconstruction scheme (really a new school) is being carried out to provide accommodation for 1,256 pupils. The work has been completed.

Star of the Sea, Sandymount.—The erection of this new school, to replace the existing Infants' School, has been completed. Accommodation is provided in the new building for 278 pupils.

St. Louis Convent Girls' and Infants', Rathmines.—The erection of these schools, which accommodate 736 pupils, has been completed and the schools opened.

St. Vincent's Christian Brothers', Glasnevin.—This new school, to replace the existing Christian Brothers' National School, has been completed, and the building is occupied. Accommodation is provided for 544 boys in the new school.

The O'Connell Christian Brothers', North Richmond Street.—Plans have been prepared for the erection of a new school for approximately 500 boys, to replace the existing Christian Brothers' National School.

Chapelizod Boys' and Girls'.—The erection of new schools for 120 boys and 176 girls, to replace the existing schools, is under consideration.

St. Audoen's Boys' and Girls'.—Plans have been prepared for the erection of new Boys', Girls' and Infants' Schools, to replace the existing schools. It is proposed to provide accommodation for 696 pupils in the new schools.

Crumlin North.—In connection with the Dublin Corporation housing schemes in this area, plans are being prepared for the erection of new schools to accommodate 992 boys, 1,000 girls, and 1,000 infants.

Ellenfield and Larkhill.—A grant has been sanctioned towards the cost of the erection of new schools to provide educational facilities in connection with the new housing schemes in this area, and a tender for the work has been accepted. Accommodation will be provided for 830 boys, 720 girls, and 720 infants.

Cabra West.—New schools will be required in connection with the housing schemes which the Corporation propose to carry out in this area. Sites have been set aside for the schools, but further developments are being deferred until such time as the Dublin Corporation is in a position to proceed with the housing scheme.

Terenure Convent.—The extension of this school, to provide accommodation for 464 additional pupils, has been completed.

Milltown Boys'.—It is proposed to erect a new school for 216 boys, to replace the existing Boys' School, which is unsuitable. Difficulty is, however, being experienced by the manager in procuring a site.

Clontarf Boys' and Girls'.—Grants have been sanctioned towards the reconstruction of a large residence to accommodate the pupils of the Clontarf Boys' and Girls' Schools, and work on the scheme is completed and the new schools in use.

St. Mary's Boys', Haddington Road.—Work is proceeding on the erection of a new school, to replace the existing school. Accommodation will be provided for 320 pupils in the new building.

Central Model Schools.—It is proposed to erect a new Infant School and to carry out a scheme which will provide for the entire reconstruction of the existing premises. The scheme is, however, temporarily deferred owing to the present emergency.

St. Brigid's Convent, Glasnevin.—Plans are being prepared for the erection of a new school for approximately 500 pupils, to replace the existing school.

TREATMENT OF ABNORMAL CHILDREN, 1939 AND 1940.

	Admitted during 1939.	Admitted during 1940.
<i>Physical Defectives :</i>		
St. Mary's Blind School (Residential) Merrion	1	3
St. Joseph's Blind School (Residential) Drumcondra	3	—
St. Joseph's School for Deaf Mutes (Residential), Cabra	1	4
<i>Hospital Schools :</i>		
St. Mary's, Cappagh, Open Air ...	6	—
St. Joseph's, Coole, Open Air ...	1	3
Orthopaedic Hospital, Merrion Street ...	24	32
<i>Convalescent Home :</i>		
Cheeverstown	373	420
<i>Mental Defectives :</i>		
St. Vincent's Home, Cabra	16 boys	21
	13 girls	—
Obelisk Park, Blackrock	7 boys	2
Oliver Plunket Colony, Mulhuddart ...	3 boys	1

				Admitted during 1939.	Admitted during 1940.
<i>Tuberculosis :</i>					
Number of children who attended for examination at Municipal Tuberculosis Department				475	396
Number found to be suffering from Pulmonary Tuberculosis and excluded from school				26	18
Number found to be suffering from Primary Tuberculosis				122	80
Number found to be suffering from Non-Pulmonary Tuberculosis				125	125

These figures for attendance and treatment include cases referred for examination during previous years, who postponed attendance until 1939. It does not include those cases seen in school last year who failed to carry out recommendation to attend at Tuberculosis Department.

DEFECTS TREATED—SCHOOL CHILDREN.

				1939	1940
Teeth	...	General Hospitals	...	918	—
		Dental Hospital	...	4,850	4,616
		Dental Clinic, Lord Edward Street	...	12,149	15,347
		Dental Clinic, Terenure	...	753	670
Skin	...	Ringworm, Head	...	40	36
		Ringworm, Body	...	13	14
		Scabies	...	48	200
		Impetigo	...	124	305
		Other Skin Conditions	...	120	130
		Visits to Out Patients' Department	...	1,356	2,330
		Light Therapy	...	91	3
<u>INTERN CASES :</u>					
		Impetigo	...	2	—
		Naevus	...	1	—
		Erythema	...	1	—
Eye	...	Defective Vision (including squint)	...	4,280	4,125
		Blepharitis	...	645	738
		Conjunctivitis	...	155	220
		Corneal Nebulae	...	6	7
		Cataract	...	6	3

Eye—continued.

	1939	1940
Cyst	—	2
Chalazion	—	9
Keratitis	5	33
Interstitial Keratitis ...	8	8
Ulcers	12	37
Trachoma	15	60
Optic Atrophy	1	2
Miscellaneous Defects ...	130	156
Visits to Out Patients' Department	4,166	5,296

INTERN CASES :

Squint	48	32
Trachoma	3	4
Blepharitis	3	—
Phlyctenular Conjunctivitis ...	2	—
Phlyctenular Keratitis ...	1	—
Interstitial Keratitis ...	1	1
Ulcers	10	—
Abscess Lid	1	—
Cataract	9	7
Ophthalmia	1	—
Cyst	1	—
Operation for removal of Cerebral Tumour for Optic Atrophy	1	—
Phlyctenular Ophthalmia ...	—	3
Optic Neuritis	—	1
Ulcerative Blepharitis ...	—	1
Tuck	—	3
Needling	—	1
Eye Removed	—	1
Detached Retina	—	1

Ear	Defective Hearing	40	30
	Otorrhoea, etc.	155	245
	Visits to Out Patients' Department	540	721

INTERN CASES :

Mastoid	10	14
Double Antrum	4	—
Polypus	2	—
Furuncle	3	2
Otitis Media	3	12
Paracentesis	1	3
Abscess	—	1
Antra	—	10

		1939	1940
Nose and Throat	Tonsils and Adenoids Operations	1,636	1,514
	Other Defects	41	20
	Nasal Obstruction	6	—
	Visits to Out Patients' Depart-		
	ment	642	500

INTERN CASES :

Abscess in Nose	—	1
Polypi	—	1

Orthopaedic Defects treated during 1939.

INTERN :

Infantile Paralysis	22	9
Dislocation of Hip	5	3
Torticollis	2	2
Scoliosis	3	—
Abscess of Ankle	1	1
Congenital Deformity of Hands	1	—
“ Talipes ”	12	11
Deformity of Foot	2	1
Varus Deformity of Legs ...	4	—
Pes Planus	1	—
Perthes' Disease	1	3
Osteomyelitis	2	1
Slipped Epiphysis	1	—
Rickets	—	4
Deformed Hand	—	1
Claw Foot	—	2
Lame	—	2
Spastic Paralysis	—	1
Double Talipes	—	3
Genu Valgum	—	1
Genu Varum	—	1
Coxa Vana	—	1

EXTERN :

Genu Varum	3	—
Genu Valgum	8	6
Pes Planus	24	16
Hollow Chest	5	—
Wasting of Leg	2	1
Wasting Shoulder Muscles ...	1	—
Infantile Paralysis	13	9
Postural Defects	41	38
“ Talipes ”	4	6
Perthes Disease	1	1

Orthopaedic Defects treated—continued.

<u>EXTERN—continued.</u>		1939	1940
Dislocation of Hip ...	...	1	3
Hallux Valgus ...	...	1	—
Narrow Chest ...	...	3	—
Pigeon Chest ...	...	5	—
Depressed Sternum ...	...	1	—
Pigeon Toed ...	...	3	—
Torticollis ...	...	4	6
Slight Curvature of Spine ...	...	1	1
Tilted Pelvis ...	...	1	—
Spastic Paralysis ...	...	—	4
Gymnastic Treatments ...	...	2,665	2,327
Orthopaedic Appliances (in- cluding renewals and repairs)	...	241	318

DENTAL CLINICS.

Lord Edward Street :	1939	1940
Number of Children treated ...	12,149	15,347
Number of Extractions ...	14,406	17,953
Number of Fillings ...	1,600	2,069
Number of Dressings ...	849	1,060
Number of Scalings ...	385	473

Terenure Dispensary :

Number of Attendances ...	753	670
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Dental Hospital :

Number of Children treated ...	4,850	4,616
Number of Extractions—		
Local Anaesthetic ...	4,096	3,561
General Anaesthetic ...	4,552	5,631
Number of Fillings ...	1,409	1,284
Number treated for Cleft Palate	4	8
Dental Cases treated in General Hospitals before 22nd Feb., 1939 ...	918	—

Spectacles :

Spectacles supplied ...	2,978	3,403
Occluders supplied ...	37	48
Spectacles repaired ...	260	444

TABLE I.

Defects found during the Two Years ended 31st December, 1940.

Total Number Examined	1939	...	20,216
	1940	...	20,652
Total	...		40,868

DEFECTS.				Defects requiring treatment		Defects requiring observation	
				1939	1940	1939	1940
TEETH	...	Dental Caries	...	13,423	14,086	205	197
SKIN	...	Ringworm, Head	...	31	22	—	—
		Ringworm, Body	...	8	18	—	—
		Scabies	...	53	68	—	—
		Impetigo	...	215	300	30	—
		Other Skin defects	...	330	396	42	8
EYE	...	Defective Vision	...	4,222	4,236	3,610	2,465
		Squint	...	535	589	44	39
		Blepharitis	...	1,000	1,038	35	24
		Conjunctivitis	...	98	125	10	11
		Keratitis	...	31	22	—	—
		Trachoma—Definite	...	64	20	—	30
		Other Eye Defects	...	52	83	15	7
EAR	...	Defective Hearing	...	77	69	7	4
		Otorrhoea, etc.	...	453	604	4	10
NOSE AND THROAT	Tonsils	...	...	2,920	3,036	2,000	2,038
	Adenoids	...	...	142	120	25	20
	Tonsils and Adenoids	...	...	953	842	132	125
	Other conditions	...	...	213	66	361	35
	Mouth Breathers	...	...	—	139	—	690
DEFECTIVE SPEECH—(Marked Degree)			...	31	9	—	30
HEART AND CIRCULATION.	Heart Disease—						
	Organic	...	...	27	30	4	30
	Functional	...	...	15	10	22	71
	Anaemia	...	...	156	89	1,027	1,430
MALNUTRITION	...	...	...	452	1,046	—	—
LUNGS	...	Bronchitis (Asthma, etc.)		—	11	133	177
TUBERCULOSIS	...	Pulmonary (Def. and Sus.)		783	875	—	—
		Non-Pul. (Glands, bones, etc.)	...	69	60	—	—

TABLE I—*continued.*

DEFECTS.				Defects requiring treatment		Defects requiring observation	
				1939	1940	1939	1940
NERVOUS SYSTEM	Epilepsy	...	...	1	1	—	2
	Chorea	...	...	5	1	1	—
	Other conditions	...	...	7	8	42	70
	Rickets	...	...	—	27	—	164
	Infantile Paralysis	...	...	—	15	—	13
*DEFORMITIES ... All forms, including Postural Defects				1,676	1,989	85	—
MENTALLY DEFECTIVE ...				35	38	—	—
RHEUMATISM ...				165	158	—	—
MISCELLANEOUS DEFECTS ...				18	33	—	—
CLEFT PALATE ...				7	11	—	—

* This does not include children suffering from Crippling Defect and unfitted for ordinary National School.

Vaccination and Uncleanliness Returns.

				1939	1940	Total.
Vaccinated	...	...	...	7,034	6,304	13,338
Defective Clothing	...	...	...	806	5,770	6,576
Defective Footgear	...	...	...	750	4,546	5,296
Uncleanliness, Body	...	...	...	1,128	4,811	5,939
„ Clothing	...	...	...	151	—	—
„ Hair and Scalp	...	...	...	2,650	3,527	6,177

The minimum standard for Cleanliness, Clothing, and Footgear are observed in this report.

JUVENILE RHEUMATISM—SUPERVISORY CENTRES— W.N.H.A.

(1939 only)

New cases examined	...	...	...	...	257
Conditions :—					
Growing Pains	...	...	...	...	79
Heart Affections	...	...	...	...	34
Growing Pains and Heart Symptoms	...	...	...	...	89
Chorea and other conditions	...	...	...	...	17
No evidence of Rheumatism	...	...	...	...	38

SCHOOL MEALS.

During the year 1940 over three and a half million meals were provided for about nineteen thousand five hundred children at an approximate expenditure of £26,000.

New utensils were provided in the following Schools :—St. Thomas's, Lr. Rutland St. ; St. Michan's, North Anne St. ; St. James's, James's St. ; Little Flower Guild, Meath St. ; St. Saviour's, Denmark St. ; St. Philomena's, Chapelizod ; St. Bride's, Great Ship St. ; St. Peter's, Phibsborough ; Christ The King's, Cabra ; St. Paul's, Queen St. ; St. Joseph's, Weaver Sq. ; St. Peter's, Camden Row.

New furniture was supplied to the following Schools :—St. Philomena's, Chapelizod ; St. Catherine's Baggot St. ; St. Laurence O'Toole's, Seville Place ; St. Patrick's, Ringsend ; St. Thomas's, Lr. Rutland Street ; C. N., Crumlin ; C. B., Crumlin ; C. N., Townsend St. ; C. N., East Wall Rd. ; St. Enda's and Dympna's, Whitefriar St. ; St. Nicholas', Francis St.

The following schools were included in the Scheme during the year 1939 :—St. Laurence O'Toole's, Seville Place ; Model Schools, Inchicore ; St. Philomena's, Phoenix Park ; and Chapelizod : and in 1940 the following additional Schools :—St. Joseph's, East Wall ; St. Louis', Ardee Road ; St. Patrick's, Cambridge Road ; St. Joseph's Boys', Terenure ; St. Agnes's C.N.S., Crumlin ; St. Columba's C.B.S., Crumlin ; All Saints', Grangegorman ; C.N., Clarendon St. ; C.N., East Wall Rd. ; C.B., Seville Place.

In addition to the monthly meetings of the ordinary Committee, the Inspection Committee visited twenty-nine Schools.

List of Schools in which Meals are provided.

All Saints', Grangegorman.	St. Laurence O'Toole's N., Seville Place.
St. Andrew's, South Gloucester Street.	St. Laurence O'Toole's C. B., Seville Place.
St. Agnes's C.N., Crumlin.	St. Louis' C.N., Ardee Road.
St. Andrew's, Pearse Street.	Loreto C.N.S., Hill Street.
St. Andrew's, Townsend Street.	St. Mary's, Mountjoy Street.
St. Audoen's, High Street.	St. Mary's, Richmond Hill.
Augustinian N.S., John Street, West.	SS. Michael and John's, Lower Exchange Street.
St. Barnabas's, Upper Sheriff Street.	St. Michan's, North Anne Street.
St. Bride's, Great Ship Street.	Model Schools, Inchicore.
St. Brigid's, Coombe.	St. Nicholas's, Francis Street.
St. Brigid's, Clarendon Street.	St. Patrick's, North King Street.
St. Brigid's, Little Strand Street.	St. Patrick's, Thorncastle Street.
St. Catherine's, Baggot Street.	St. Patrick's, Cambridge Road.
St. Catherine's, Meath Street.	St. Patrick's, Lower Rutland Street.
Christ The King's, Cabra.	St. Paul's, Queen Street.
St. Columba's, Great Strand Street.	St. Peter's, Camden Row.
St. Columba's, Crumlin.	St. Peter's, Phibsborough.
SS. Enda and Dymphna's, White- friar Street.	St. Philomena's, Chapelizod.
Gardiner Street C.N.S.	St. Philomena's, George's Hill.
St. James's, Basin Lane.	St. Philomena's, Phoenix Park.
St. James's, James's Street.	Rathmines Township N.S., Upper Rathmines.
St. Joseph's, Dorset Street.	St. Saviour's, Denmark Street.
St. Joseph's, East Wall.	St. Thomas's, Lower Rutland Street.
St. Joseph's, Liffey Street.	Tranquilla N.S., Rathmines.
St. Joseph's, St. Mary's Road.	St. Vincent's, Golden Bridge.
St. Joseph's, School Street.	St. Vincent's, North William Street.
St. Joseph's, Terenure.	
St. Joseph's, Weaver's Square.	
St. Joseph's, Wellington Street.	

VETERINARY DEPARTMENT

REPORT

OF THE

CHIEF VETERINARY INSPECTOR

P. F. DOLAN, M.R.C.V.S., D.V.S.M.

For Years 1939 and 1940.

REPORT OF THE CHIEF VETERINARY INSPECTOR.

The duties of the Veterinary Department are classified as follows :—

1. Milk Inspection.
2. Meat Inspection.
3. Duties involved under the Diseases of Animals Acts.
4. Bacteriological Laboratory.
5. The attendance on and purchase of animals the property of the Corporation.

1. MILK INSPECTION.

During the period under review the control of milk supplies was carried out under the following legislative enactments :—

Milk & Dairies Act, 1935.

Milk & Dairies Act, 1935 (Date of Commencement)
(No. 1) Order, 1936.

Milk & Dairies Regulations, 1936.

Registration of Dairymen Regulations, 1936.

Milk & Dairies (Prohibition Order) Regulations,
1936.

Milk & Dairies Act, 1935 (Appeal to District
Court under Section 41) Regulations, 1936.

Milk & Dairies (Fees for Bacteriological Examination)
Regulations, 1936.

Milk & Dairies (Bacteriological Examination)
Regulations, 1936.

Milk & Dairies (Milk Sampling) Regulations, 1936.

Milk & Dairies Act, 1935 (Date of Commencement)
(No. 3) Order, 1938.

Milk & Dairies (General Designations) Regulations, 1938.

Milk & Dairies (Special Designations) Regulations, 1938.

Milk & Dairies (Sale of Heated Milk) (Restrictions) Regulations, 1938.

Milk & Dairies (Special Designations) (Amendment) Regulations, 1939.

The Milk & Dairies Act, 1935, with the exception of Section 32, Section 33 and the whole of Part IV, came into operation on the 1st January, 1937.

By the Milk & Dairies Act, 1935 (Date of Commencement) (No. 3) Order, 1938, Sections 32, 33 and the whole of Part IV of the Act came into operation on the 1st April, 1939. Section 32 and the regulations made thereunder, viz., Milk & Dairies (Sale of Heated Milk) (Restrictions) Regulations, 1938, prohibit the sale of whole milk which has been heated to a temperature higher than 110 degrees Fahrenheit or which has been pasteurised, except by virtue of a special designation licence to sell Pasteurised Milk. Exemption is allowed in respect of heated milk sold for consumption as hot milk, e.g., in restaurants, cafes, etc. Under Section 33 the Ministry may on the application of the sanitary authority of a sanitary district prohibit the sale of milk in such district or part thereof unless the milk is sold under a special designation. Before making application a sanitary authority must give public notice of their intention. The Minister may revoke the order of prohibition on application from the sanitary authority. In the case of the County Borough of Dublin the making of an application is a reserved function for the purposes of the Local Government (Dublin) Act, 1930. Part IV of the Act, the Milk & Dairies (General Designations) Regulations, 1938, and the Milk & Dairies (Special Designations) Regulations, 1938, govern the sale of milk under special and general designation.

The Milk & Dairies (General Designations) Regulations, 1938, the Milk & Dairies (Special Designations) Regulations, 1938, and the Milk & Dairies (Sale of Heated Milk) (Restriction) Regulations, 1938, also came into force on the 1st April, 1939.

These Regulations prescribe the General and Special Designations which may be used in connection with the sale of milk for human consumption in the form of milk. The Regulations apply only to the sale of whole milk and do not affect the sale of skimmed or separated milk, cream or buttermilk.

The Milk & Dairies (General Designations) Regulations, 1938, provided that the words "Milk" "New Milk" and "Fresh Milk" may be used without obtaining a special designation licence in connection with milk offered or exposed for sale. Each of these expressions shall be general designations within the meaning of Section 38 of the Milk and Dairies Act, 1935.

The Milk & Dairies (Special Designations) Regulations, 1938, provide that milk may be sold under the designations. "Highest Grade Milk" "Standard Milk" and "Pasteurised Milk" in accordance with a licence granted by the appropriate licensing authority.

It is therefore an offence to use any descriptive words or signs in connection with the sale of milk which are neither a general nor a special designation and which indicate or are intended to indicate that the milk is of a particular quality or prepared in a particular manner or suitable for a particular purpose.

Provision is made in the Special Designation Regulations for the grant of the following licences:—Producer's Licence, Pasteuriser's Licence, Milk Bottler's Licence and Dealer's Licence.

Producers', Pasteurisers' and Milk Bottlers' Licences are granted by the Minister and Dealers' Licences by the sanitary authorities. Every licence is granted

subject to compliance with these Regulations and to the general and special conditions set out in the first and second schedules to these Regulations.

Producers' Licences are granted in respect of Highest Grade Milk and Standard Milk. This licence entitles the holder to sell milk produced only by him, and if he desires to sell milk not produced by him he must obtain a further licence for that purpose from the appropriate licensing authority.

A Pasteuriser's Licence entitles the holder to sell under the special designation "Pasteurised Milk," milk pasteurised by him at premises specified in the licence.

Milk Bottlers' Licences are granted in respect of Highest Grade Milk, Standard Milk and Pasteurised Milk. A Milk Bottler's Licence entitles the holder to sell under the special designation to which the licence relates, milk which has been bottled at premises specified in the licence, provided such milk has not been produced or pasteurised by him, but has been purchased under special designation. Where milk is sold from a vehicle it is deemed to be sold at the premises from which the vehicle is sent.

A separate licence is required for the use of each special designation and separate fees are payable. The holder of a licence to sell Highest Grade Milk may, however, sell such milk as Standard Milk without any further licence or payment of an additional fee.

Licences expire on the 31st December of each year. The Minister may suspend or revoke any licence. A sanitary authority may refuse, suspend or revoke in certain circumstances a dealer's licence subject to a right of appeal within 14 days to the Minister whose decision is final.

The provisions of the Milk & Dairies Act and the Milk and Dairies Regulations apply to the holders of special designation licences. Before a licence for

designated milk is granted the applicant must satisfy the licensing authority that the prescribed conditions will be complied with regularly. Where any alterations of dairy premises are contemplated the licensing authority should first be consulted.

The holder of a licence to sell milk under special designation must take such measures as the licensing authority may require to ensure that such milk is kept separate from all other milk.

Where the holder of a licence also sells milk by retail under a general designation and uses the special designation in any notice on a vehicle or premises, he must also include in the notice an equally conspicuous reference to the general designation. The holder of licences for the use of different designations must also include in any such notice a similar reference to each designation.

Under the Milk & Dairies (Special Designations) (Amendment) Regulations, 1939, amendments are made to certain conditions in the second schedule to the Milk & Dairies (Special Designations) Regulations, 1938.

The following explanatory Memoranda have been published by the Department of Local Government and Public Health :—

Memorandum on the Milk & Dairies (General Designations) Regulations, 1938 ; Milk & Dairies (Special Designations) Regulations, 1938 ; Milk & Dairies (Sale of Heated Milk) (Restriction) Regulations, 1938.

Memorandum on the Establishment and Maintenance of a Tuberculin Tested Herd.

Memorandum on Laboratory Technique of Test for Coliform Bacillus, Plate Count Test, Methylene Blue Reduction Test.

From the 1st April to the 31st December, 1939, 314 Dealer's Licences were issued for the sale of milk

under special designation at 357 premises, in accordance with the Milk and Dairies (Special Designations) Regulations, 1938. Of these licences, three authorised the sale of Highest Grade Milk, one the sale of Standard Milk and the remainder the sale of Pasteurised Milk. Refusal Orders were served on 14 applicants for licences.

During the year 1940, 526 Dealer's Licences were issued in respect of 577 premises. Of these licences 522 were issued for the sale of Pasteurised Milk and 4 for the sale of Highest Grade Milk. Refusal Orders were served on 7 applicants for licences.

On the 31st December, 1940, the following were entered on the Register of Dairymen :—

Total No. of Dairymen registered	...	2,045
Total No. of Premises registered	...	2,131
Premises where cows are kept	...	201
Dairy Shops, Stores, etc.	...	1,685
Vehicles of 209 persons whose premises are outside area of County Borough of Dublin	... ..	245

	1939	1940
No. of Inspections of Dairy Shops and Stores	9,086	17,202

INFECTIOUS DISEASES ON DAIRY PREMISES.

Disease.	No. of Cases.	
	1939	1940
Diphtheria	1	9
Scarlatina	3	6
Erysipelas	—	1

All the notifications of infectious diseases received from Hospitals and Doctors during the year were examined each morning by an Inspector, for the purpose of identifying any outbreak of disease with any person connected with the business of Cowkeeper, Purveyor of Milk, or Hawker of Milk.

When an outbreak of infectious disease occurred on a dairy premises, the sale or distribution of milk therefrom was suspended until full inquiries had been made, disinfection carried out and all risk of contamination eliminated.

EXAMINATION OF MILCH COWS IN CITY DAIRY YARDS.

4,470 cows housed in City dairy yards were examined at different periods during the years 1939 and 1940. Each suspect cow was given a reference number, and the case was entered in the Bacteriological Record Books. 700 suspect cases were dealt with during the two years.

When a cow was found to be affected with tuberculosis of the udder, giving tuberculous milk, or showing any of the forms of tuberculosis as specified in the Bovine Tuberculosis Order of 1926, she was slaughtered with all possible speed.

When a cow was found to be affected with any disease or condition likely to infect the milk, a notice was served on the owner interdicting the sale of milk from this animal. 255 of these notices were served on owners.

The system adopted for the examination of milch cows was as follows: 1,089 samples in the period under review were taken from cows with abnormal udders in City dairy yards, and in cases where tuberculosis was suspected the milk was centrifuged and the deposit examined for tubercle bacilli. If the microscopic examinations were negative the milk was

submitted to biological examination. In all other cases of abnormal udders, where the condition was found not to be due to streptococci, etc., samples of milk were grouped and the group samples submitted to biological examination. These measures were adopted to ensure that all cows with tuberculous udders were detected. The carrying out of this work necessitated 1,121 special visits to City Dairy Yards, and 23,736 examinations of the milch cows.

A summary of this work is set out in the following table :—

	1939	1940
No. of special visits 	563	558
No. of examinations of milch cows	12,236	11,500
No. of cows from which separate samples of milk were taken for bacteriological examination	389	311
No. of samples of milk taken and bacteriologically examined ...	587	502
No. of cows in respect of which notices interdicting the sale of milk were served ...	126	129
No. of cows in City Dairy Yards found with tuberculosis of the udder	10	7

SUMMARY OF PROSECUTIONS FOR OFFENCES IN CONNECTION WITH THE SALE OF
MILK HEARD IN THE DISTRICT COURT DURING YEARS 1939 AND 1940.

OFFENCE	No. of Cases	Fines £ s. d.	Costs £ s. d.	D.P.O.A.	Adjourned Generally	Poor Box £ s. d.
Unsuitable Premises	7	3 15 0	—	1	—	—
Non-protection of milk or utensils from contamination ...	45	27 18 0	2 1 6	6	2	10 0
Failure to register for sale of milk ...	27	9 3 0	7 11 0	11	—	5 0
Continuing sale of milk after being served with a Refusal Order ...	4	1 10 0	—	4	—	—
Milk samples containing bacteria in excess of the prescribed number per unit volume ...	9	5 1 0	—	—	—	—
Breaches of the Milk and Dairies (Special Designations) Regulations, 1938 ...	12	3 11 0	10 6	6	—	—
	104	£50 18 0	£10 3 0	28	2	15 0

2.—MEAT INSPECTION.

NUMBER OF ANIMALS SLAUGHTERED AT THE CORPORATION ABATTOIR.

				1939	1940
Bulls	...	...	...	15	30
Bullocks	...	...	...	3,086	3,289
Cows	...	...	...	7,896	10,911
Heifers	...	...	...	4,835	3,769
Calves	...	...	...	262	123
TOTAL CATTLE				16,094	18,122
Sheep	...	...	...	60,878	44,119
Goats	...	...	...	6	9
Swine	...	...	...	11,479	10,486
TOTAL ANIMALS				88,457	72,736

TABLE SHOWING THE AMOUNT OF DRESSED MEAT SENT INTO THE CORPORATION ABATTOIR AND THE AMOUNT CONDEMNED.

Amount sent in			Amount Condemned
Beef	... 97 Quarters		60 Quarters, 2 Partial.
Veal	... 1 Body		Nil.
Mutton and Lamb	43 Bodies		7 Bodies.

CARCASSES WHOLLY OR PARTIALLY CONDEMNED AT THE CORPORATION ABATTOIR.

YEAR 1939.

147

	BULLS		BULLOCKS		COWS		HEIFERS		CALVES		TOTAL CATTLE		SHEEP		SWINE	
	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	No.	Wt. in lbs.
Tuberculosis ...	1	—	27	102	253	171	16	58	1	—	298	331	14,641	—	5	74
Traumatism ...	—	—	2	30	29	66	—	9	—	2	31	107	5,717	—	19	295
Oedematous and Wasted.	—	—	2	—	16	—	—	—	3	—	21	—	—	—	—	—
Redwater ...	—	—	—	—	1	—	1	—	—	—	2	—	—	—	—	—
Moribund and Ill Bled.	1	—	—	—	10	—	4	—	—	—	15	—	—	—	—	—
Gangrene ...	—	—	—	—	1	—	1	—	—	—	2	—	—	—	—	—
Swine Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Septic Conditions	—	1	1	5	16	4	—	1	1	—	18	11	625	17	1	2
Other Conditions	—	1	1	3	6	1	—	—	—	—	7	14	1,161	10	—	—
Decomposition*	1	—	4	1	9	—	1	1	—	—	15	2	157	58	—	—
Black Quarter...	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
Malignant Disease	—	—	—	—	1	—	1	—	—	—	2	—	—	—	—	—
TOTALS ...	3	2	37	141	342	251	24	70	5	2	411	466	22,338	159	24	369

* These figures include condemnations of dressed meat.

CARCASES WHOLLY OR PARTIALLY CONDEMNED AT THE CORPORATION ABATTOIR.

YEAR 1940.

	BULLS		BULLOCKS		COWS		HEIFERS		CALVES		TOTAL CATTLE			SHEEP			SWINE		
	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial	Whole	Partial		Whole	No.	Wt. in lbs.	Whole	No.	Wt. in lbs.
												No.							
Tuberculosis ...	1	1	35	56	487	396	19	5	2	—	544	458	22,119	—	—	—	13	9	115
Traumatism ...	—	—	2	50	45	119	—	11	—	3	47	182	8,833	3	49	301	—	29	321
Oedematous and Wasted.	—	—	4	—	34	—	—	—	—	—	38	—	—	10	—	—	—	4	—
Redwater ...	—	—	—	—	8	—	1	—	—	—	9	—	—	—	—	—	—	—	—
Moribund and Ill Bled.	—	—	3	—	11	—	2	—	—	—	16	—	—	21	—	—	8	—	—
Gangrene ...	—	—	1	—	1	—	—	—	—	—	2	—	—	—	—	—	—	—	—
Swine Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Septic Conditions	—	1	5	5	30	8	—	2	1	—	36	16	865	11	15	103	3	—	—
Other Conditions	—	—	3	3	5	4	—	—	—	—	8	7	426	5	—	—	—	—	—
Decomposition*	—	—	4	2	5	—	—	—	—	—	9	2	158	28	—	—	10	2	138
Malignant Disease	—	—	1	—	30	2	2	—	—	—	32	2	—	5	—	—	1	—	—
TOTALS ...	1	2	58	116	656	529	24	18	3	3	741	667	32,401	83	64	404	36	44	574

* These figures include condemnations of dressed meat.

1939.

This Return does not include the organs of animals totally condemned, but includes organs destroyed on account of tuberculous contamination.

	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Total Cattle.	Sheep.	Swine.	TOTAL.
LUNGS :									
Tuberculosis ...	1	256	2,049	231	5	2,542	—	152	2,694
Abscesses ...	—	4	5	3	—	12	14	1	27
Pneumonia ...	—	3	15	3	2	23	8	18	49
Pleurisy ...	—	31	69	19	2	121	21	26	168
Parasitism ...	—	14	46	9	—	69	7	—	76
Cysts ...	—	—	10	2	—	12	—	1	13
Other Conditions ...	—	9	16	7	—	32	27	6	65
HEARTS :									
Tuberculosis ...	—	111	854	71	—	1,036	—	134	1,170
Other Conditions ...	1	9	18	4	—	32	47	26	105
SKIRTS :									
Tuberculosis ...	—	16	154	31	—	201	—	6	207
Abscesses ...	—	1	7	—	—	8	—	—	8
Other Conditions ...	—	2	19	1	—	22	6	1	29
STOMACHS :									
Tuberculosis(S.Memb.)	—	29	324	29	1	383	—	41	424
Abscesses ...	—	2	2	1	—	5	—	—	5
Other Conditions ...	1	4	16	1	—	22	22	8	52
INTESTINES :									
Tuberculosis ...	—	15	74	1	—	90	—	3	93
do. with Fat	1	98	636	57	1	793	1	87	881
Other Conditions ...	1	3	9	1	—	14	24	7	45
SPLEENS :									
Tuberculosis ...	—	26	252	22	—	300	—	39	339
Other Conditions ...	1	6	20	—	1	28	21	10	59

RETURN OF ORGANS, Etc., CONDEMNED AT DUBLIN CORPORATION ABATTOIR—continued.

	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Total Cattle.	Sheep.	Swine.	TOTAL.
LIVERS:									
Tuberculosis	—	90	623	66	1	780	—	129	909
Abscesses ...	—	22	67	21	—	110	4	9	123
Necrosis ...	—	3	7	4	—	14	2	9	25
Cirrhosis ...	—	2	—	—	—	2	1	3	6
Echinococcus	—	3	48	8	—	59	223	1	283
Distomatosis	—	406	2,401	497	—	3,304	1,031	—	4,335
Degeneration	—	—	5	3	1	9	1	—	10
Cav. Angioma	—	3	59	13	—	75	75	—	150
Other Conditions	1	6	29	3	—	39	24	24	87
KIDNEYS:									
Tuberculosis	—	11	62	1	—	74	—	3	77
Abscesses ...	—	—	5	—	—	5	—	—	5
Cysts	—	—	—	—	—	—	—	—	—
Nephritis ...	—	—	16	2	—	18	—	2	20
Other Conditions	—	13	7	2	—	22	—	—	22
UPPERS:									
Tuberculosis	—	—	9	—	—	9	—	—	9
Abscesses ...	—	—	1	—	—	1	—	—	1
Mastitis ...	—	—	8	—	—	8	—	—	8
Other Conditions	—	—	—	—	—	—	—	—	—
UTERI:									
Tuberculosis	—	—	5	—	—	5	—	—	5
Metritis ...	—	—	—	—	—	—	—	—	—
Other Conditions	—	—	1	—	—	1	—	—	1
HEADS:									
Tuberculosis	—	153	928	117	4	1,202	—	535	1,737
Actino ...	—	47	19	10	—	76	—	26	102
Abscesses ...	—	—	3	—	—	3	2	—	5
Traumatism	—	—	1	—	—	1	—	—	1
Other Conditions	—	—	3	2	—	5	—	—	5
TONGUES:									
Tuberculosis	—	153	928	117	4	1,202	—	535	1,737
Actino ...	—	46	3	5	1	55	1	1	57
Other Conditions	1	—	4	—	—	5	16	2	23
TOTALS	8	1,599	9,835	1,364	23	12,829	1,578	1,845	16,252

RETURN OF ORGANS, ETC., CONDEMNED AT DUBLIN CORPORATION ABATTOIR.

1940.

This Return does not include the organs of animals totally condemned, but includes organs destroyed on account of tuberculous contamination.

	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Total Cattle.	Sheep.	Swine.	Total.
LUNGS:									
Tuberculosis ...	1	262	3,064	141	2	3,470	—	196	3,666
Abscesses ...	1	4	11	3	2	19	15	—	34
Pneumonia ...	—	5	20	1	2	28	—	67	95
Pleurisy ...	—	17	56	13	—	86	5	41	132
Parasitism ...	—	7	35	8	—	50	2	10	62
Cysts ...	—	1	19	1	—	21	—	—	21
Other Conditions ...	—	8	34	4	—	46	7	7	60
HEARTS:									
Tuberculosis ...	1	125	1,957	51	—	2,134	—	183	2,317
Other Conditions ...	1	9	31	8	1	50	24	68	142
SKIRTS:									
Tuberculosis ...	1	14	210	17	—	242	—	8	250
Abscesses ...	—	2	1	3	—	6	—	—	6
Other Conditions ...	—	2	14	3	—	19	3	2	24
STOMACHS:									
Tuberculosis(S.Memb.) ...	—	38	867	22	—	927	—	61	988
Abscesses ...	—	1	5	—	—	6	—	—	6
Other Conditions ...	—	3	20	—	—	23	3	1	27
INTESTINES:									
Tuberculosis ...	—	3	147	—	—	150	—	5	155
do. with Fat ...	1	86	1,340	37	2	1,466	—	91	1,557
Other Conditions ...	—	1	16	3	—	20	4	3	27
SPLEENS:									
Tuberculosis ...	—	32	609	19	—	660	—	49	709
Other Conditions ...	—	—	4	3	—	7	1	2	10

RETURN OF ORGANS, ETC., CONDEMNED AT DUBLIN CORPORATION ABATTOIR—continued.

	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Total Cattle.	Sheep.	Swine.	TOTAL.
LIVERS :									
Tuberculosis	4	105	1,236	49	1	1,395	—	158	1,553
Abscesses ...	—	13	49	12	—	74	—	—	74
Necrosis ...	—	5	7	—	—	12	—	—	12
Cirrhosis ...	—	—	—	—	—	—	—	2	2
Echinococcus	—	—	5	—	—	5	—	4	9
Distomatosis	—	444	4,141	302	—	4,887	970	4	5,861
Degeneration	—	—	3	—	—	3	1	—	4
Cav. Angioma	—	1	45	—	—	46	—	—	46
Other Conditions	—	5	25	4	—	34	12	34	79
KIDNEYS :									
Tuberculosis	—	8	43	5	—	56	—	—	56
Abscesses ...	—	—	7	—	—	7	—	—	7
Cysts ...	—	—	—	—	—	—	—	—	—
Nephritis	—	—	65	2	—	67	—	—	67
Other Conditions	—	2	9	2	—	13	5	2	20
UPPERS :									
Tuberculosis	—	—	5	1	—	6	—	—	6
Abscesses ...	—	—	3	—	—	3	—	—	3
Mastitis ...	—	—	10	—	—	10	—	—	10
Other Conditions	—	—	1	—	—	1	—	—	1
UTERI :									
Tuberculosis	—	—	23	—	—	23	—	—	23
Metritis ...	—	—	—	—	—	—	—	—	—
Other Conditions	—	—	—	—	—	—	—	—	—
HEADS :									
Tuberculosis	3	166	1,370	79	5	1,623	—	547	2,170
Actino ...	—	34	12	4	—	50	—	—	50
Abscesses	—	3	2	1	—	6	—	—	6
Traumatism	—	1	1	1	—	3	—	1	4
Other Conditions	—	—	3	2	—	3	7	—	10
TONGUES :									
Tuberculosis	7	180	1,298	76	3	1,564	—	537	2,101
Actino ...	—	26	17	4	—	47	—	—	47
Other Conditions	—	—	3	—	—	3	4	—	7
TOTALS	20	1,613	16,843	879	16	19,371	1,063	2,083	22,516

In addition 35 Organs were condemned for Decomposition.

TABLE SHOWING THE INCIDENCES OF TUBERCULOSIS
IN CATTLE SLAUGHTERED AT CORPORATION ABATTOIR.

Cows.

Year.		Affected.	Slaughtered.	Percentage.
1927	...	1,368	4,573	29·91
1928	...	2,459	7,437	33·06
1929	...	2,232	6,866	32·5
1930	...	1,738	5,269	32·8
1931	...	1,280	4,019	31·85
1932	...	1,687	5,086	33·17
1933	...	2,025	6,468	31·3
1934	...	} (Figures not available).		
1935	...			
1936	...	1,906	6,041	31·4
1937	...	2,521	7,560	33·3
1938	...	2,369	7,403	32·2
1939	...	2,628	7,896	33·3
		<hr/>	<hr/>	<hr/>
		22,213	68,618	32·4
		<hr/>	<hr/>	<hr/>

BULLOCKS.

1927	...	266	3,579	7·4
1928	...	256	2,896	8·84
1929	...	229	2,728	8·39
1930	...	279	2,660	10·4
1931	...	290	2,835	10·2
1932	...	251	2,884	8·74
1933	...	784	7,036	11·1
1934	...	} (Figures not available).		
1935	...			
1936	...	462	4,798	9·6
1937	...	327	3,273	10·0
1938	...	390	2,451	15·9
1939	...	397	3,086	12·9
		<hr/>	<hr/>	<hr/>
		3,931	38,226	10·3
		<hr/>	<hr/>	<hr/>

HEIFERS.

Year.	Affected.	Slaughtered.	Percentage.
1927 ...	147	2,618	5·6
1928 ...	171	2,756	6·2
1929 ...	185	3,056	6·05
1930 ...	174	2,879	6·04
1931 ...	197	3,008	6·55
1932 ...	239	3,753	6·37
1933 ...	383	5,676	6·8
1934 ...	} (Figures not available).		
1935 ...			
1936 ...	399	5,998	6·7
1937 ...	341	5,282	6·4
1938 ...	465	5,818	7·99
1939 ...	339	4,835	7·0
	<u>3,040</u>	<u>45,679</u>	<u>6·6</u>

ESTIMATE OF ANIMALS SLAUGHTERED IN PRIVATE
SLAUGHTERHOUSES, AND FACTORIES.

	1939	1940
Cattle ...	27,132	28,301
Sheep and Lambs ...	105,983	119,517
Pigs ...	86,878	86,162
No. of Private Slaughterhouses	57	55
No. of Knackers' Yards ...	1	1
No. of Victuallers using Private Slaughterhouses ...	136	140
No. of Victuallers using the Corporation Abattoir ...	136	115
No. of Inspections of:—		
Slaughterhouses ...	5,395	6,179
Shops, Factories and Depots ...	576	1,367
Stallholders, Hawkers, etc. ...	3,305	6,351
Markets and Stores ...	139	196
	<u>9,415</u>	<u>14,093</u>

In addition to the foregoing inspections whole-time inspection was carried out at the Corporation Abattoir and inspection of the weekly Cattle Market was also made.

DISEASED AND SUSPECTED ANIMALS DEALT WITH IN MARKETS, LAIRS, ETC., UNDER FOOD
INSPECTION, DURING THE YEAR 1939.

ANIMALS DEALT WITH	HOW CARCASSES WERE DEALT WITH				Removed Outside our Jurisdiction	Dealt with under T.B. Order and Restrictions removed
	Passed	Condemned				
		Total	Partial	Organs only		
CATTLE 169 ...	41	28	39	22	38	1
SHEEP 7 ...	4	1	2	—	—	—
PIGS 16 ...	6	4	1	2	3	—
TOTAL 192 ...	51	33	42	24	41	1

DISEASED AND SUSPECTED ANIMALS DEALT WITH IN MARKETS, LAIRS, ETC., UNDER FOOD
INSPECTION, DURING THE YEAR 1940.

ANIMALS DEALT WITH		HOW CARCASSES WERE DEALT WITH				Removed Outside our Jurisdiction	Dealt with under T.B. Order and Restrictions removed
		Passed	Condemned				
			Total	Partial	Organs only		
CATTLE	287 ...	48	67	32	86	52	2
SHEEP	7 ...	3	1	3	—	—	—
PIGS	38 ...	19	—	6	—	13	—
TOTAL	332 ...	70	68	41	86	65	2

NUMBER OF ANIMALS IN MARKETS ON THURSDAYS DURING THE YEAR 1939.

BEASTS.		CALVES.	SHEEP.	PIGS.
Fat.	Dairy.			
March Quarter ...	5,039	1,138	69,362	17,145
June Quarter ...	4,782	1,524	91,028	14,135
September Quarter ...	6,366	1,521	95,718	12,842
December Quarter ...	3,534	1,198	61,912	13,373
TOTALS ...	19,721	5,381	318,020	57,495

NUMBER OF ANIMALS IN MARKETS ON THURSDAYS DURING THE YEAR 1940.

	B E A S T S .		C A L V E S .	S H E E P .	P I G S .
	Fat.	Dairy.			
March Quarter
June Quarter
September Quarter
December Quarter
TOTALS

TOTAL WEIGHT OF UNSOUND FOOD—YEARS, 1939 AND 1940.

	1939	1940
Meat and Organs, Beef, Mutton, Pork and Bacon ...	1,274,454 lbs.	1,625,300 lbs.
Fish ...	60,606 lbs.	82,806 lbs.
Fruit and Vegetables	12,112 lbs.	24,236 lbs.
Miscellaneous ...	674 lbs.	199 lbs.
TOTAL WEIGHT	1,347,846 lbs.	1,732,541 lbs.

SUMMARY OF PROSECUTIONS FOR UNSOUND FOOD, ETC.

During the years 1939 and 1940, 18 prosecutions were heard for offences connected with unsound meat. In 13 of these cases fines amounting to £60 12s. 6d. were imposed. Of the remainder, 2 were dismissed and 3 were dismissed under the Probation of Offenders' Act.

Slaughter of Animals Act, 1935.

Slaughter of Animals (Slaughter Licence) Regulations, 1936.

Slaughter of Animals (Approved Instruments) Order, 1936.

During 1939 and 1940, 388 slaughter licences were issued, for which fees amounting to £97 were received, as prescribed by the Slaughter of Animals Act. Prosecutions were heard in 29 cases for offences under the Act and fines amounting to £15 7s. 6d. were imposed.

3. DISEASES OF ANIMALS ACTS.

BOVINE TUBERCULOSIS ORDER :

No. of cows found to be affected with tuberculosis of the udder	....	....	18
No. of animals found to be showing definite clinical symptoms of tuberculosis with chronic cough	....	....	9

TOTAL	....	....	27

No. of cows with abnormal udders, in City Dairy Yards, on samples of milk being bacteriologically examined found not to be affected with any forms of tuberculosis as specified in the Bovine Tuberculosis Order	520
--	------	------	-----

No. of animals (reported) found after examination not to be affected with any of the forms of tuberculosis as specified in the Bovine Tuberculosis Order	....	....	17

Total No. of Animals dealt with	....	537

20 animals were found to come within the scope of the Bovine Tuberculosis Order. The agreed valuation of the animals on which compensation was paid amounted to £205 10s. and £100 10s. 2d. was paid to the owners.

The nett expenditure amounted to £62 16s. 2d. which was refunded to the Corporation by the Department of Agriculture.

PARASITIC MANGE ORDER :

No. of Cases investigated	....	....	Nil
No. of Outbreaks	....	....	Nil

SHEEP SCAB ORDER :

No. of Actual outbreaks	....	....	54
No. of Animals affected	....	....	168
No. of Animals in contact	....	....	489
No. of prosecutions for breach of the Sheep Scab Order	....	....	3

Total penalties imposed :—Fines £4.

SHEEP DIPPING ORDER :

The enforcement of the provisions of the above Order necessitated 109 visits to Markets and Sheep Sales by four specially appointed Inspectors.

No. of sheep for which Declarations of Dipping were produced and examined at the Dublin Cattle Market	....	157,131
No. of sheep dipped under supervision	....	Nil
No. of prosecutions for breaches of the Sheep Dipping Order	....	Nil

RABIES ORDER :

No. of reports of suspected outbreaks	....	Nil
No. of outbreaks (actual)	....	Nil

ANTHRAX ORDER :

No animals within the City were found affected with this disease during the years 1939 and 1940.

Routine work has been carried out under the Foot and Mouth Disease (Ireland) Order, of 1900, and the associated Orders, and also under the following Orders : the " Swine Fever (Ireland) Order of 1901 " and the " Parasitic Mange (Cattle) Order of 1927." The work performed in connection with the other Orders under the Diseases of Animals Acts was mainly of a preventive nature.

WARBLE FLY (TREATMENT OF CATTLE) ORDER.

The provisions of this Order were enforced during the treatment period. There were 3,173 visits to premises, a total of 143,737 cattle were examined, 23,243 of these were found with warbles and 21,853 were found to have been dressed.

12,908 Cattle, housed and grazed in the City Area, were examined, 4,611 of these were found to have been infested, and the whole of them were dressed.

121,100 Cattle passing through markets, saleyards and lairs were examined, 16,614 of these were found to have been infested and 15,736 to have been dressed.

RETURNS OF SPECIAL SHEEP SALES AND SALES OF STORE BEASTS
DURING THE YEAR 1939.

PERIOD		SHEEP	STORE BEASTS
March Quarter	... ..	...	13,232
June Quarter	... ..	...	18,846
September Quarter	31,634	17,104
December Quarter	6,616	16,687
TOTALS		38,250	65,869

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NOTE:—For number of animals in markets on Thursdays during the year 1939, see page (157).

RETURNS OF SPECIAL SHEEP SALES AND SALES OF STORE BEASTS
DURING THE YEAR 1940.

PERIOD				SHEEP	STORE BEASTS
March Quarter	...	...	...	242	11,968
June Quarter	...	...	...	60	19,045
September Quarter	29,879	18,131
December Quarter	3,510	19,058
TOTALS	33,691	68,202

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NOTE.—For number of animals in markets on Thursdays during the year 1940 see page 158.

4. BACTERIOLOGICAL LABORATORY.

MICROSCOPIC EXAMINATION OF SAMPLES DIRECT FROM COWS IN CITY DAIRY YARDS.

	1939	1940
No. of Microscopic Examinations of Samples	438	381
RESULTS OF EXAMINATIONS :		
Streptococci	113	152
Diplococci	10	19
Mixed Infection	11	10
Tubercle Bacilli	20	23
Other Organisms	36	19
Negative	248	158

SPUTUM (Cows) :

No. of Microscopic Examinations	23	13
--------------------------------------	----	----

RESULTS OF EXAMINATIONS :

Tubercle Bacilli	9	7
Negative	14	6

SAMPLES OF MILK AND SECRETION FROM COWS OTHER THAN IN CITY DAIRY YARDS.

No. of Microscopic Examinations	16	8
---------------------------------	----	---

RESULTS OF EXAMINATIONS :

Streptococci	4	4
Tubercle Bacilli	3	—
Other Organisms	2	2
Negative	7	2

BIOLOGICAL EXAMINATION OF MILK.

GROUP SAMPLES :			1939	1940
No. of Examinations	....	....	46	58
Positive ....	....	....	1	4
Negative	....	....	45	54
DIRECT SAMPLES :				
No. of Examinations	....	....	10	8
Positive ....	....	....	1	1
Negative	....	....	9	7
SAMPLES TAKEN AT INFANT AID DEPOTS :				
No. of Examinations	...	...	15	28
Positive ....	....	....	Nil.	Nil.
Negative	....	....	15	28
SAMPLES TAKEN AT HOSPITALS :				
No. of Examinations	...	...		30
Positive ...	...	...		Nil.
Negative	...	...		30
TOTAL NO. OF EXAMINATIONS		...	71	124
Positive ...	...	...	2	5
Negative	...	...	69	119

SKIN SCRAPINGS FOR PARASITIC MANGE.

	1939	1940
No. of Specimens	3	4
Positive	Nil.	Nil.
Negative	3	4

WOOL SAMPLES.

No. of Specimens	20	39
No. of cases in which the Psoroptes ovis was found	17	39
No. of cases which were negative	3	Nil.

BLOOD FILMS FOR ANTHRAX.

No. of Specimens	15	20
Positive	Nil.	Nil.
Negative	15	20

5. THE ATTENDANCE ON AND PURCHASE OF ANIMALS THE PROPERTY OF THE CORPORATION.

YEAR 1939 AND 1940.

HORSES :	1939	1940
No. of visits ...	154	153
No. of attendances ...	343	339
No. of Horses purchased ...	Nil	Nil
No. of Horses cast ...	10	33
Total No. of Horses in Stud on 31st December, 1940	78	45

CATTLE :

During the period the animals on the Crooksling Sanatorium Farm have been attended on, also each animal of the dairy herd has been subjected to the tuberculin test.

The herd has been tuberculin-tested regularly and has been maintained abortion free.

The first six cows were purchased in the year 1926 and the herd comprised on the 31st December, 1940, 97 animals including heifers and rearing-calves selected for the maintenance of the herd. The herd was self-contained in 1930, and was maintained by the heifer calves, with the exception of four cows purchased at the one time in February, 1934. In the period under review an additional 12 cows were purchased and added to the herd. The total milk yield for the two years was 573,240 lbs.

The following tables give (1) an analysis of the causes of the elimination of animals, for each year, since the formation of the herd in October, 1926, to the end of 1940 and (2) a summary of the results of the post-mortem examinations on 87 of the eliminated animals, during the same period.

(1) DEPRECIATION IN ANIMALS IN HERD FROM OCTOBER, 1926, TO 31st DECEMBER, 1940.

Year	Reactors	Doubtful Reactors	Mastitis	Defective Quarters	Sterility	Milk Records	Bulls	Reactors Agglutination Test	Other Causes	TOTAL
1927	4	—	1	—	—	1	—	—	—	6
1928	3	2	—	—	1	—	—	—	1	7
1929	1	2	3	2	2	—	—	—	3	13
1930	1	2	1	2	—	2	1	(b) 1	—	10
1931	2	1	2	—	—	1	1	—	2	9
1932	1	—	—	—	2	—	—	—	2	5
1933	2	—	3	—	1	4	—	—	2	12
1934	(a) 4	—	2	—	—	1	1	—	—	8
1935	—	—	5	—	2	—	1	—	—	8
1936	—	—	10	—	—	2	—	—	—	12
1937	—	2	5	5	3	—	—	—	1	16
1938	—	—	3	—	3	—	—	—	1	7
1939	—	—	2	—	—	5	1	—	2	10
1940	4	—	3	—	—	5	—	—	1	13
TOTAL ...	22	9	40	9	14	21	5	1	15	136

(a) P.M.E.: One minute lesion in mesenterics.
 One pseudo-tuberculosis.
 Two, no macroscopic evidence of tuberculosis.
 (b) On re-test five weeks after purchase in April 1930.

(2) POST MORTEM EXAMINATIONS HELD ON 87 OF THE 136 ELIMINATED ANIMALS.

Reactors	Post Mortem Examinations	Evidence of Tuberculosis Found				No Macroscopic Lesions of Tuberculosis
		Mesenterics	Bronchial only	Pharyngeal only	Pseudo- Tuberculosis on Hock	
22	21	7	2	1	1	10
Doubtful Reactors 9	4	—	—	—	—	4
Remaining Eliminated Animals 105	62	—	—	—	—	62

P. F. DOLAN,
Chief Veterinary Inspector.

SANITARY DEPARTMENT

SANITARY DEPARTMENT.

For the purposes of the administration of the Sanitary Services the City is divided into twenty-one areas, to each of which a full-time Sanitary Inspector is allocated, under the immediate control of two Supervisory Officers. Appended are given brief particulars of the major activities of this Department.

LIMEWASHING OF TENEMENT HOUSES.

With the exception of 77 tenements, in respect of which prosecutions were instituted against the Owners, all tenements were limewashed twice in the year in compliance with Tenement Bye-Law 34.

VERBAL NOTICES.

Where feasible, the Sanitary Inspectors give verbal notices to Owners and Agents concerned, thereby saving consequently much time and expenditure. Practically all of the 14,642 notices given during 1939 and 1940 received the necessary attention.

REBATES OF RATES.

Under Section 72 of the Local Government (Dublin) Act, 1930, owners of houses of not more than £8 valuation get a rebate of 20% on their taxes, provided these dwellings are in good repair. The purport of this Section is to encourage the owners of this class of property to maintain the houses in a habitable condition throughout the year. In 1939 there were 380 applications made covering 6,756 valuations, of which 86 were rejected. The figures for 1940 were 296, 6,608 and 129, respectively. In addition to these there were 21 valuations ineligible for rebate in consequence of the owners residing on the premises.

ABANDONED HOUSES.

There were 35 abandoned tenements dealt with in the period. These premises, generally in a state of advance decay, are abandoned by their Owners because of their inability to maintain them in a satisfactory state. The labouring staff of this Department regularly cleanse the yards, sanitary accommodation, etc., of these houses.

COMMON LODGING HOUSES.	Total.	
	1939	1940
Number on Register at 1st January	26	23
New Registrations effected during the year	1	—
Removals from Register during the year	1	3
Number of visits during the year	150	297
Verbal Notices given for nuisances	42	48
Verbal Notices for breaches of Bye-Laws	16	20

The accommodation varies from 8 to 508 persons to a house.

On visiting the Lodging Houses, special attention was directed to the general condition of the premises, including cleanliness, lighting and ventilation, as well as the beds and bedding. The prevention of overcrowding was rigidly enforced, and immediate measures adopted for the abatement of any nuisance or for the repairs of any structural defects discovered.

A Common Lodginghouse is defined as :—

“ A house in which or in any part of which persons are harboured or lodged for hire for a single night, or for less than a week at a time.”

THE IVEAGH NIGHTLY LODGING HOUSE.

The late Viscount Iveagh has not only provided a large number of Flats for the working classes but has also provided a very handsome building known as the Iveagh House in Bride Road, for the reception of single men. The accommodation is for 508 lodgers in single cubicles. Hot and cold baths are obtainable and each lodger is provided with a locker in which personal possessions can be safeguarded. There are dining, reading, writing and smoking rooms.

Convenient to the Iveagh House is another modern building under the management of the Society of St. Vincent de Paul. This suitably constructed building contains about 200 beds and is equipped with every modern improvement, comprising hot and cold water baths, foot baths, washing troughs, drying and clothes rooms, etc. It is for the accommodation of the very poor and homeless, and men temporarily out of employment. Lodgers are provided with supper, bed and breakfast free.

SMOKE NUISANCES.

During the period 104 complaints were received in respect of smoke nuisances from factory chimneys. These complaints received prompt attention and the nuisances were abated by increasing the height of the chimneys, or by structural alterations to the boiler plant. A change of fuel was made in a few instances with satisfactory results.

Since 1935 new workshops established number 386, analysed as follows :—

1935.	1936.	1937.	1938.	1939.	1940.
96	60	93	76	35	26

The establishment and subsequent workings of these workshops engage the attention of the Sanitary Inspectors. Occupiers, through no fault of their own, are generally not very conversant with the regulations from a sanitary standpoint, and this branch of the service is in constant co-operation with the Department of Industry and Commerce, in securing observance of requirements.

RE SECTION 9 OF THE FACTORY AND WORKSHOPS ACT, 1901.

The notices served under this Act were as follows :—

	Total.	
	1939	1940
1. Sanitary Accommodation opening directly into Factory	17	23
2. Sanitary Accommodation not sufficiently lighted	7	19
3. Sufficient Sanitary Accommodation not provided	11	17
4. Male and Female Sanitary Accommodation side by side without separate approaches	2	3
5. Sanitary Accommodation not provided	6	2
6. Sanitary Accommodation not suitably screened	3	4
7. Sanitary Accommodation dirty	16	22
8. Other defects	14	18

FACTORY AND WORKSHOPS ACT, 1901.

OUTWORKERS.

104 Firms sent in their lists, in the prescribed Form, twice each year. The number of Outworkers in the February Lists was 540 and the number in the August Lists was 537. The institution of legal proceedings was not necessary, but six firms were cautioned for delay in furnishing their returns.

The Outworkers were engaged at the following trades :—Wearing Apparel (Making, etc.), Household Linen, Lace, Curtains and Furniture Hangings, Upholstery, File-making, Brass, Locks, Umbrellas, Artificial Flowers, Paper Bags, Basket-making, Boot and Shoe Making and Repairing, and processes incidental to above.

OFFENSIVE TRADES.

There are on the Register of Offensive Trades in the City 139 businesses under this category.

The trades are as follows :—

Soap-boiler.

Gut Scraper.

Blood-boiler.

Bone-boiler.

Fellmonger.

Tallow Melter.

Rags, Bones and Uncured Skins.

These trades are under constant supervision, and the appropriate Acts appertaining to their working are strictly applied. In a few instances, where the premises were not being kept clean, marked improvements were effected following representations from this Department.

SANITARY ADMINISTRATION.

	1939.	1940.
Inspections of Tenement Houses	38,002	46,984
Re-Inspections of Tenement Houses	15,013	17,697
Inspections of Other Houses, Cottages, etc. ...	11,967	15,417
Other Inspections, including Schools, Stables, etc.	9,849	12,982
Rooms Inspected	190,572	
Rooms Re-Inspected	15,289	214,875
Inspections of Offensive Trade Premises ...	298	543
Inspections of Workshops	1,266	2,109
Surveys of New Workshops	35	26
Inspections of Outworkers' Premises ...	29	82
Inspections of Piggeries	801	1,531
Piggeries Ceased	4	6
Inspections of Bakeries	88	204
Inspections of Common Lodging Houses ...	134	277
Nightly Inspections of Common Lodging Houses	16	20
Inspections of Weekly Lodging Houses ...	229	297
Inspections of Dwellings for Rebates of Rates	5,756	6,608
Basements permanently closed during year ...	88	26
Number of Written Notices served	9,830	9,563
Number of Verbal Notices given	6,642	8,000
Number of Notices served under Bye-Law 34 (Lime-washing)	12,614	10,466
Number of Nuisances found due to complaints	5,922	5,058
Defects Discovered	22,999	24,884
Defects Remedied	18,403	18,895
Tests Applied to House Drains	479	476
Choked Drains Freed	1,413	1,385
Inspections of Drains	—	744
Reports received in writing from Medical Officers of Health	44	37
Accumulations of Manure removed	40	303
Interviews with Property Owners as to Sanitary Requirements	2,604	2,400
Nuisances from Smoke Abated	23	81
Inspections of Ice Cream Shops	81	455
Inspections of Burial Grounds	280	280
Inspections of Caravans	55	60

Return of Sanitary Prosecutions, 1939-1940.

PROSECUTIONS :			Total	
			1939	1940
Summonses (Ordinary)	...		423	526
„ (Disobedience)	...		40	51
„ (Bye-Laws)	...		86	45
„ (Sec. 56)	...	...	2	4
„ (Secs. 83 and 84)	...		22	8
„ (Closing)	...	...	1	—
„ (Bye-Law for Keeping of Animals)			—	3
Adjourned cases brought forward			362	256
RESULTS OF PROSECUTIONS :				
Justices' Orders obtained	...		230	280
Owners fined (absolute)	...		104	69
Cases adjourned	...	...	330	251
Probation Act	...	...	—	—
Summonses marked “ Abated ”			143	276
„ Struck out	...	...	29	10
„ Dismissed	...	...	6	4
„ Proved but Dismissed	...		—	3
Prohibition Orders obtained	...		1	1
Total amount of Penalties imposed (absolute)				
			£261 0s. 6d.	£149 10s. 6d.

MEDICAL OFFICERS' REPORTS, 1939.

Number of Reports, received in writing, from Medical
Officers of Health.

Name.					Number.	
					1939	1940
Dr. Burke	...	...	...	...	7	5
„ Cusack	...	...	...	...	1	4
„ Dillon	...	...	...	...	1	2
„ Falvey	...	...	...	...	8	7
„ Grimley	...	...	...	...	1	1
„ Harrison	...	...	...	...	5	1
„ Hooper	...	...	...	...	1	2
„ Lynch	...	...	...	...	3	1
„ Murray	...	...	...	...	5	—
„ O'Sullivan	...	...	...	...	4	—
„ Peppard	...	...	...	...	4	1
„ Toher	...	...	...	...	3	3
„ Westropp, Acting M.O.H.	...	...	...	...	1	—
„ Eustace	...	...	...	...	—	1
„ Fitzgerald	...	...	...	...	—	1
„ Hannigan	...	...	...	...	—	1
„ Hayes	...	...	...	...	—	2
„ McElligott	...	...	...	...	—	2
„ Naughton	...	...	...	...	—	1
„ Walsh	...	...	...	...	—	2
TOTAL					44	37

In addition to above many verbal complaints are received from the District Medical Officers of Health.

HOUSING CONDITIONS AS AT 31st DECEMBER, 1939.

The figures compiled in connection with the Survey of Housing Conditions in the City made in 1938 have been brought up to date, to 31st December 1939. The following is the position :—

1. No of families living in BASEMENTS unfit for human habitation	....	....	1,109
2. No. of families living in TENEMENTS unfit for human habitation (excluding basements)	....	....	12,744
3. No. of families living in COTTAGES unfit for human habitation	....	....	3,196
4. No. of families living in STABLE DWELLINGS, ETC., unfit for human habitation	....	....	283
5. No. of families living in OVERCROWDED DWELLINGS, otherwise FIT for human habitation	....	....	4,516

Total No. of Families in Need of Re-Housing 21,848

ENTIRE CITY.

	1938	1939	Increase or Decrease	
No. of "Fit" Houses	4,485	4,482	Decrease	3
No. of Families living in Overcrowded Rooms	4,223	4,516	Increase	293
No. of "Unfit" Houses	6,554	6,299	Decrease	255
No. of Families living in "Unfit" Houses	16,818	16,223	Decrease	595
No. of Families living in Basements	1,131	1,109	Decrease	22
TOTAL No. of Families in need of re-housing	22,172	21,848	Decrease	324
No. of Tenements	6,307	6,162	Decrease	145
No. of Fit Tenements	3,346	3,342	Decrease	4
No. of Unfit Tenements	2,961	2,820	Decrease	141
No. of Cottages	4,381	4,274	Decrease	107
No. of Fit Cottages	1,078	1,078	No change.	
No. of Unfit Cottages	3,303	3,196	Decrease	107
No. of Stable Dwellings, and Others	351	345	Decrease	6

ENTIRE CITY—*continued.*

	1938	1939	Increase or Decrease	
No. of Fit Stable Dwellings and Others	61	62	Increase ...	1
No. of Unfit Stable Dwellings and Others	290	283	Decrease ...	7
No. of Families living in part of room	83	81	Decrease ...	2
No. of Families living in 1 room dwellings	21,091	20,685	Decrease ...	406
No. of Families living in 2 room dwellings	8,673	8,528	Decrease ...	145
No. of Families living in 3 room dwellings	3,564	3,525	Decrease ...	39
TOTAL No. of FAMILIES ...	33,411	32,819	Decrease ...	592
TOTAL No. of Persons ...	130,769	128,075	Decrease ...	2,694

STEPS TAKEN TO ENSURE THE PURITY OF THE WATER SUPPLY TO THE CITY.

The main source of the water supply to Dublin is the River Vartry, the waters of which are impounded in two reservoirs near Roundwood, Co. Wicklow. The water from these reservoirs is treated by slow sand filters at Roundwood and conveyed thence to Service reservoirs near Stillorgan, Co. Dublin, whence it is distributed to the City and adjoining areas.

A subsidiary source of supply is the River Dodder on which there is an impounding reservoir at Bohernabreena, Co. Dublin. The water from this reservoir is taken to Ballyboden, Co. Dublin, where it is treated by slow sand filters and distributed from a service reservoir.

Pending the completion of the Liffey Water Supply Scheme, the above supplies are being temporarily supplemented by a supply from the Grand Canal, the waters of which are treated by settling tanks and slow sand filters at points near the 5th and 8th Locks.

The supplies from all three sources are treated by chlorination plants in addition to the other purification processes mentioned, and samples from each course of supply are submitted fortnightly to chemical and weekly to bacteriological examination.

DEPARTMENT OF THE
CITY ANALYST.

REPORT OF THE CITY ANALYST.

Analyses and investigations were conducted under the following headings :—

1. The Sale of Food and Drugs Acts.
2. The Public Health Preservatives Regulations, 1928.
3. Daily control and fortnightly analysis of the City Water Supply.
4. Analyses in connection with Corporation Supplies.
5. Chemical control of sewage effluent.
6. Analyses of medicines for County Homes and Hospitals.
7. Analyses for other Local Authorities under the Food and Drugs Acts and Preservatives Regulations.
8. Miscellaneous analyses for Public Institutions, Companies and private individuals.

General Statement of Work for Dublin Corporation and City of Dublin.

Nature of Article	No. of Samples		Department
	1939	1940	
Food and Drugs ...	3,839	3,664	Public Health.
City Water Supplies ...	165	173	Engineering.
Sewage	322	278	„
Effluent	332	292	„
Sludge	445	327	„
Water (special samples) ...	13	13	„
Specimens from Liffey Tunnel	2	—	„
Chloros	1	—	„
Stained Articles of Clothing	2	—	„
Sewage (special samples) ...	23	—	„
Oily Waste	1	—	„
Concrete Pipe	6	—	„
Stoneware Pipe	7	—	„
Mastic Asphalt	5	16	„
Petrol	2	—	„
Sediment from Water Main	1	—	„
White Spirit	2	—	„
Water Meters	2	—	„
Paint	7	—	Housing.
Orange Liquid	1	—	Veterinary.
Tinned Cream	1	—	„
Milk	1	4	„
Milk	5	1	Schools Meals Committee.
Milk	2	—	Public Health.
Crude Oil	1	—	„
Chlorine Solution	1	1	Public Baths.
Butter	1	—	Crooksling Sanatorium.
	—	2	Veterinary.
Water	3	1	Sanitary.
TOTAL (Dublin Corporation)	5,193	4,798	

	1939	1940
Analyses for Private individuals (City of Dublin)	235	332
Analyses for Dublin Union	345	321
Analyses for Infant Aid Society	42	—
	<hr/> 622	<hr/> 653
TOTAL for City of Dublin	5,815	5,451

Analyses for Bodies outside City of Dublin.

	1939	1940
Local Bodies and County Hospitals	9,286	8,664
Private Individuals	126	98
	<hr/> 9,412	<hr/> 8,762
GRAND TOTAL	15,227	14,213

The following table compares the total number of samples analysed in 1939 with that recorded in previous years :—

YEAR.	Total number of samples from all sources.
1922—1926 (both inclusive)	53,751
1927—1931 (both inclusive)	68,002
1932	14,481
1933	13,648
1934	14,581
1935	15,613
1936	15,886
1937	14,874
1938	15,305
1939	15,227
1940	14,213

DUBLIN CORPORATION.

SALE OF FOOD AND DRUGS ACTS AND PRESERVATIVES REGULATIONS.

Details of articles submitted by the Food and Drugs Inspectors of the Dublin Corporation, and analysed under the above headings are set out below.

The total number of articles submitted was 7,503 of which 434 were “informal samples,” that is to say, not divided in accordance with the provisions of Section 14 of the 1875 Act.

FORMAL SAMPLES.

Nature of Article	Number of Samples		Number Adulterated	
	1939	1940	1939	1940
Milk	2,421	2,412	99	121
Butter	810	785	Nil	3
Cheese	64	96	„	Nil
Raisins	18	12	„	„
Cocoa	22	17	„	„
Sultanas	23	21	„	„
Tea	10	33	„	„
Sugar	16	11	„	„
Margarine	16	10	„	„
Buttermilk	9	1	3	„
Currants	5	4	Nil	„
Rice	4	8	„	„
Oatmeal	4	5	„	„
Indian Meal	2	1	„	„
Whiskey	1	5	„	1
Lard	1	1	„	1
Rose Water and Glycerine	1	—	„	„
Vinegar	—	5	—	4
Cornflour	—	2	—	Nil
„ substitute	—	1	—	„
Mustard	—	4	—	„
Flour	—	1	—	„
Coffee	—	1	—	„

INFORMAL SAMPLES.

Nature of Article	Number of Samples		Number Adulterated	
	1939	1940	1939	1940
Butter	105	111	Nil	1
Milk	94	94	14	8
Vinegar	3	5	Nil	4
Cheese	3	7	„	Nil
Cherries	1	1	„	„
Margarine	—	4	—	„
Dripping	—	1	—	„
Tincture of Iodine	—	2	—	„
Zinc Ointment	—	1	—	„
Camphorated Oil	—	1	—	„
Orange and Quinine Tonic	—	1	—	„

MILK.

Of the “formal” samples, taken during 1939, certified to be adulterated forty-eight were deficient in milk-fat in amounts varying from 6·66 to 58·33 per cent. ; forty-four were deficient in non-fatty solids in amounts varying from 4·12 to 18·23 per cent. In addition one of these samples was artificially coloured with Annatto.

There were five samples deficient in both milk fat and non-fatty solids. One of these, which was deficient of 11·66 per cent. milk fat and 20·58 per cent. non-fatty solids also contained Annatto.

Under the Provisions of the Public Health (Saorstát Éireann) (Preservatives, etc., in Food) Regulations 1928, the addition to food (including milk) of certain named colouring matters is forbidden.

These forbidden colours are considered to be harmful, and Annatto is not amongst them.

As far as I am aware these are the only regulations in Éire governing the addition of artificial colours to food-stuffs, and therefore, as the law stands, it is not an offence to add Annatto to milk.

In Great Britain and Northern Ireland, the addition of any colouring matter whatsoever to milk is expressly forbidden, and I am strongly of opinion that the same should apply to Éire.

Annatto when added to milk imparts to the milk a fictitious appearance of richness, in other words the public is deceived. Where it is added to a milk grossly deficient in milk-fat and other solids it constitutes, in my opinion, a serious aggravation of the offence.

Two further samples were found to contain boron compounds, as preservatives.

Of the fourteen "Informal Samples" found to be deficient, two were deficient in milk-fat; ten in non-fatty solids; the remaining two samples being deficient in both fat and non-fatty solids.

Of the 2,412 samples of milk taken during 1940, 46 were deficient in milk-fat in amounts varying from 6.66 to 45.0 per cent.; 66 were deficient in non-fatty solids in amounts varying from 2.94 to 30.58 per cent.; whilst 9 samples were deficient in both milk-fat and solids non-fat. Of the 94 "informal" samples, 8 did not comply with the legal requirements.

BUTTERMILK.

The three adulterated samples were deficient in non-fatty solids in amounts varying from 27.42 per cent. to 45.16 per cent.

VETERINARY DEPARTMENT.

The orange coloured fluid proved to be Annatto.

The sample of milk was badly adulterated being deficient of 41.66 per cent. of its milk-fat and 28.23

per cent. of its non-fatty solids. The 4 samples of milk submitted in 1940 were for the purpose of ascertaining if any were unpasteurised. All four proved to be pasteurised.

SANITARY DEPARTMENT.

The three samples of water from this Department were submitted as a result of complaints. All three proved to be normal.

SCHOOLS MEALS COMMITTEE.

One of the five samples of milk received during 1939 proved to be deficient of 20 per cent. of its milk-fat. The remaining four were above the average quality. The sample of milk submitted in 1940 proved to be deficient in milk-fat to the extent of 13 per cent.

INFANT AID SOCIETY.

Forty-two samples only were examined for this Body, as compared with 176 in the previous year.

This decrease resulted from the introduction of the Milk and Dairies (Special Designation Regulations) 1938, which became operative on the 1st April, 1939. The analysis of the milk is now controlled by a Government Department and samples are no longer submitted to this laboratory.

ENGINEERING DEPARTMENT.

2,454 samples were examined for the various sections of the Engineering Department during the year. Amongst them were the usual number of waters in connection with the City Waters Supplies. In addition to the chemical analysis of these samples, others are collected weekly by a member of the City Laboratory Staff for bacteriological examination.

The tests in connection with the action of Vartry Water on various types of service pipes were continued throughout the year.

The chemical control of the Sewage Disposal Scheme involved the analysis of 600 samples of sewage ; 624 samples of effluent ; and 772 of sludge.

Twenty-three special samples of sewage were analysed in connection with an investigation by the Main Drainage Section to ascertain the feasibility of directing from the sewers, to the River Liffey, a considerable volume of drainage of a non-sewage character, which is discharged from the premises of Messrs. Arthur Guinness & Son.

Of the various samples of water for special examination, two were submitted for "hardness" test, the remainder were examined with a view to tracing their origin, if possible.

WHISKEY.

One sample of whiskey of the 5 received was deficient in alcoholic strength. It was found to have a strength of 38·24 degrees under proof.

The stained articles of clothing were covered with blue spots, and a complaint was made that the Water Supply was at fault. Samples of water taken at various times proved to be normal, and did not produce any blue spots on white articles when experimentally tested. The exact nature of the blue spots could not be ascertained, owing to the minute quantity of material available, but it was proved that they did not contain either copper or iron. It seemed unlikely that the Water Supply was to blame.

Of the two samples of petrol submitted one was satisfactory, whilst the second did not answer the requirements of a petrol. It had all the characteristics of "White Spirit."

The various other articles such as stoneware pipe, mastic asphalt, etc., were submitted in connection with Corporation Supplies.

HOUSING ARCHITECT'S DEPARTMENT.

Seven samples of paint were examined for this Department to check up on that in actual use on the job.

Analyses for other Public Bodies, Private Individuals, etc.

The total number of articles received from all sources under the above heading was 9,647 in 1939 9,415 in 1940.

The fees for analyses received in connection with this work during 1939 amounted to £2,299 10s. 2d. and in 1940, £2,134 1s. 6d. These sums were lodged to the credit of the Dublin Corporation in accordance with the terms of my appointment.

The following table compares the number of samples analysed under the above heading, and the total fees received in respect of same, with the records for previous years.

YEAR	No. of Samples.	Fees for Analysis.		
		£	s.	d.
1922—1926	53,751	6,668	18	1
1927—1931	45,094	10,011	11	4
1932	9,220	1,814	18	10
1933	9,627	1,805	14	4
1934	10,034	1,806	10	11
1935	10,481	1,855	14	4
1936	10,868	1,751	0	0
1937	10,331	1,785	1	6
1938	10,327	2,079	13	6
1939	9,647	2,299	10	2
1940	9,415	2,134	1	6

B. G. FAGAN,
City Analyst.

SCHEME FOR THE WELFARE OF THE BLIND.

Dublin County Borough.

STATEMENT SHOWING THE NUMBER OF BLIND PERSONS
REGISTERED UNDER SCHEME AS ON THE 31ST
DECEMBER, 1940.

Blind Persons dealt with under Scheme	NUMBER OF BLIND PERSONS AT THE AGES OF				Total
	Under 5 years	5 and under 15 years	15 and under 30 years	30 years and upwards	
I. <i>Number maintained in approved Institutions.</i>					
(a) St. Mary's, { Males	1	2	—	—	3
Merrion { Females	—	7	12	34	53
(b) St. Joseph's, Drumcondra—Males	—	3	12	17	32
(c) Richmond National Institution—Males	—	—	—	26	26
(d) Cork Blind	—	—	1	—	1
II. <i>Number assisted in their own Homes.</i>					
(a) Single or { Males	—	—	13	258	271
Widowed { Females	—	—	16	448	464
Persons					
(b) Married Blind Men	—	—	4	207	211
(c) Married Blind Women	—	—	1	39	40
TOTALS ...	1	12	59	1,029	1,101
Total Number on Register on 31st December, 1940.	1	12	59	1,029	1,101

ACTUAL PAYMENTS MADE IN CONNECTION WITH ABOVE SCHEME DURING YEAR ENDED 31ST DECEMBER, 1940.

Nature of Payment.	Amount.	Nature of Payment	Amount.
	£ s. d.		£ s. d.
St. Mary's, Merrion	1,127 10 6	Examination and certi-	
St. Joseph's,		fication of Blind Persons	27 10 0
Drumcondra ...	754 19 2	Stationery and Office	
Richmond National	486 3 11	Expenditure ...	24 14 6
Cork Asylum ...	27 19 0	Other Expenses:	
Allowances to Blind		Salaries ...	665 4 10
Persons in their own		Home Teachers ...	345 0 0
Homes ...	19,502 7 5	Miscellaneous ...	8 8 7
TOTALS	£21,899 0 0	TOTAL	£1,070 17 11
GRAND TOTAL			£22,969 17 11

Operations under Scheme for Welfare of Blind.

Number of Blind Persons on Register	...	...	...	1,101
„ Blind Persons in receipt of Monetary Assistance				986
„ Applications for Assistance received	...	...		251
„ Applications for Assistance granted	...	...		172
„ Applications for Assistance declared ineligible	...			67
„ Applications for Assistance pending at close of year	...	...	...	12
„ Blind Persons in Institutions for Blind—Males				59
„ Blind Persons in Institutions for Blind—Females				56
„ Blind Persons declining Institutional Treatment				5
„ Visits to Institutions for Blind	...	...		32
„ Visits to Beneficiaries' Homes	...	...		2,188
„ Blind Persons registered solely for the purpose of obtaining Free Wireless Licences		...		—
„ Forms issued for Free Wireless Licences		...		42
„ Married Blind out-door workers in Institutions in receipt of augmentation of Wages		...		12
„ Beneficiaries admitted to Public Institutions, <i>i.e.</i> , Dublin Union, Hospitals, etc.	...	...		161
„ Beneficiaries discharged from same	...	...		59
„ Certificates issued by Ophthalmic Surgeons	...			109
„ Bedridden Beneficiaries whose allowances were collected by Home Teachers	...	...		54
„ Beneficiaries living in Hostels	...	...		20
„ Children, under 15 years, of Blind Persons in employment	...	...	...	—
„ Children, over 15 years, of Blind Persons in employment	...	...	...	29
„ Complaints investigated regarding begging, performing for profit by Beneficiaries in the streets	...	...	...	7
„ Cases where reductions in allowances were made on account of undisclosed earnings		...		2
„ Replies sent to State Pension Officers regarding Allowances paid to Blind Persons		...		68
„ Deaths of Beneficiaries	...	...	...	72
„ Deaths of Beneficiaries' Children	...	...		2
„ Children born to Beneficiaries	...	...		16
„ Beneficiaries transferred to Dublin Co. Council				2
„ Beneficiaries transferred from Co. Dublin to City				1
„ Beneficiaries who left City	...	...	...	4
„ Blind Persons declining further Assistance	...			1
„ Blind Persons who entered the married state	...			1

Monetary Assistance to Blind Persons in their own Homes.

Return showing the Amount expended on Domiciliary Allowances to Blind Persons and the Number Assisted during the years 1930 to 1940.

Year		Expenditure	Number assisted
		£	
1930	...	12,310	484
1931	...	13,718	560
1932	...	17,095	645
1933	...	15,792	737
1934	...	18,122	880
1935	...	19,570	950
1936	...	16,426	897
1937	...	19,184	930
1938	...	20,300	976
1939	...	18,571	1,000
1940	...	19,502	986

MUNICIPAL BATHS AND WASH HOUSE, TARA STREET.

The returns from the Baths and Wash Houses show that 98,229 persons visited the establishment during 1939 and 93,181 during 1940.

The income derived amounted to £1,646 12s. 0d. in 1939 and £1,478 4s. 11d. in 1940.

During the ten months the Swimming Baths were open, they were used by 47,092 persons in 1939 and 48,310 in 1940.

During the same period the First Class Swimming Bath was reserved every Tuesday afternoon from 3 to 8 p.m. for the exclusive use of Females.

Pupils from Christian Brothers' Schools, National Schools, Catholic Boy Scouts and Belvedere News Boys' Club were admitted to the Swimming Baths to the number of 4,212 at a charge of one penny each boy.

273 Visits were made after the usual closing hours by Male, and 147 by Female Clubs, the sum of £299 0s. 0d., being the income derived from these Swimming Clubs during the year.

The Private Reclining Baths were availed of by 61,801 Males, the number of Females, 13,192.

The Public Wash House (Laundry) was utilised by 15,631 women. The income derived from users of the Wash House amounted to £157 3s. 2d.

Comparison with previous years shows a considerable falling off in the number of visitors, with consequent reduction in receipts ; this can be accounted for by the lighting restrictions enforced by A.R.P. regulations, which necessitated the closing down of the establishment each afternoon, and the total exclusion of Swimming Clubs over a considerable period.

The water in the two Swimming Baths is renewed every twenty-four hours (each bath contains approximately 70,000 galls.): and is chlorinated twice daily in accordance with instructions given by Mr. B. J. Fagan, B.Sc., F.I.C., A.R.C.Sc.I., City Analyst.

PATRICK LYNCH.

PUBLIC CLEANSING.

The Public Cleansing Services comprise three important functions, namely :—

1. Street cleansing,
2. Collection of refuse,
3. Disposal of refuse.

STREET CLEANSING.

The Cleansing Department are responsible for the cleaning of all the streets, road gullies and catch-pits within the city boundary and the periodic emptying of ashbins and the disposal of the refuse collected therefrom.

All the streets are swept weekly, bi-weekly or thrice-weekly, depending on their location, etc. The principal streets and streets in congested areas receive constant daily attention.

Eight motor washing and sweeping machines are utilised for washing and sweeping the principal thoroughfares nightly.

Two petrol driven vacuum gully emptying vehicles and two petrol driven road sweeping and collection vehicles are also in use.

A patrol staff of 95 men with litter carts or barrows are daily employed sweeping the channels of the main thoroughfares.

For the year ending 31st March, 1939, 37,420 tons of street sweepings were collected and disposed of on the various tipping grounds and the figure for period ending 31st March, 1940, was 28,276 tons.

On Sundays a limited staff is engaged on street cleansing work.

REFUSE COLLECTION.

In practically all areas a thrice-weekly collection is made of domestic refuse and in the principal shopping centres collection is made on five days per week.

A fleet of 42 petrol driven refuse collection vehicles varying from three to five tons and fitted with hydraulic tipping gear and with sliding covers to prevent scattering of contents, and also 85 horse drawn vehicles are utilised for the collection of street and domestic refuse.

For the year ended 31st March, 1939, the total quantity of domestic and trade refuse collected was 129,306 tons, equivalent to an average yield of 14·7 cwts. per 1,000 of population per day (365 days). In 1940 the total tonnage was 123,868, equivalent to an average yield of 13·6 cwts. 123,818 tons in 1939 and 119,165 tons in 1940 were disposed of on the various disposal grounds, principally at East Wall Road foreshore reclamation on the north side of the city, and at Mount Argus on the south side of the city, where ground is being filled in for use as a public park. 10,191 tons were consumed at the Stanley Street Destructor in the period covered by this report.

PUBLIC CONVENIENCES.

There are 67 Public Conveniences in the City, which are cleansed and disinfected daily.

With a view to obtaining the co-operation of the citizens to reduce the output of refuse and to avoid the throwing of litter on the streets appeals are frequently made to the public by means of posters displayed throughout the City and at the principal railway termini.

SALE OF FOOD AND DRUGS ACT.

During the period under review 7,292 samples of food and drugs were submitted for analysis. Of these samples 6,869 were formal or official samples, and 423 informal or test samples. The formal samples represented 22 different articles of food.

Shops inspected numbered 256.

In the following table is a summary of the prosecutions during the years 1939 and 1940 for offences under the Food and Drugs, Margarine, and Public Health (Preservatives, etc., in Food) Regulations, 1928.

Nature of Sample	No. found Adulterated	No. of Prosecutions	No. of Convictions	No. otherwise dealt with	Penalties and Costs
Milk ...	220	194	182	12	£172 Fines.
„ ...	Refusal to sell.	1	1	—	£3.
Butter ...	1	1	—	Withdrawn on payment of Costs.	£3 3s. Costs.
Margarine	4	4	4	—	£3.
Whiskey	1	1	1	—	£3.
Vinegar ...	4	4	3	—	£4 15s.

STATEMENT SHOWING WORK PERFORMED BY THE DISINFECTING DEPARTMENT FOR THE
YEARS, 1939 AND 1940.

Year	Dwellings Disin- fected	Rooms Disin- fected	Removals of Clothing	Articles Disin- fected	Articles Washed	Persons using Disin- fecting Chamber	Patients removed to Hospital	Disin- fections after Phthisis	Mattresses Supplied
1939 ...	2,629	3,852	6,149	46,416	3,694	3,627	1,630	407	2
1940 ...	2,192	3,379	5,224	67,329	3,965	3,077	657	362	2
TOTAL ...	4,821	7,231	11,373	113,745	7,659	6,704	2,287	769	4

In addition 409 persons used the Medicated Baths at the Department.

WATER SUPPLY.

Report by N. A. CHANCE, Esq., B.A.I., M.I.C.E.I.,
City Engineer.

Hereunder I give particulars asked for in yours of 24th instant.

The total quantity of water supplied by the Corporation averaged 21 million gallons per day, made up as follows :—

Vartry Reservoirs	....	17 million gallons.
Bohernabreena (River Dodder).	....	3·8 „ „
Grand Canal	....	0·2 „ „

The Vartry and Dodder sources are upland catchments where the danger of pollution is remote.

All the water supplied is passed through slow-sand filters, and in addition is sterilized by chlorination treatment.

Fortnightly chemical and bacteriological tests are made of the filtered water, and tests of the raw water at intermediate stages of purification are also made at regular intervals.

Throughout the year the chemical analysis showed only the seasonal changes, which, over a long number of years, have been known to occur.

The bacteriological results of the filtered water were of a uniformly high standard.

The service reservoirs at Stillorgan (Vartry) and Ballyboden (Dodder) and the clear water tanks at the Vartry filters are protected from pollution by sea gulls by bronze wires stretched across the water at frequent intervals. This protection has proved very effective.

During the year about $13\frac{1}{2}$ miles of distribution mains have been cleaned and relined or relaid.

DIAGNOSIS AND TREATMENT OF VENEREAL DISEASES.

The Scheme for the Diagnosis and Treatment of Venereal Diseases came into operation in January, 1919, and provides free and efficient treatment for sufferers.

Arrangements have been made for the establishment of a Treatment Centre and Clinic and for the setting-apart of wards for in-patients at Dr. Steevens' Hospital and Sir Patrick Dun's Hospital, where patients are enabled to enter through the out-door department of the general dispensaries.

By arrangement with the authorities of Trinity College, University College and the Royal College of Surgeons, Medical practitioners practising in the City can obtain, free, scientific reports on any material obtained from a patient suspected to be suffering from Venereal Disease, and skilled assistance in treatment is placed at their disposal. Supplies of Salvarsan substitutes can be obtained by Medical practitioners through Dr. Steevens' Hospital.

The following is a summary of the work carried out at the Treatment Centres during the period under review :—

	Dr. Steevens' Hospital	Sir Patrick Dun's Hospital
No. of new patients attending Out-patient Clinic	912	488
No. of old and new patients attending Outpatient Clinic	3,258	756
Total No. of attendances at Out-patient Clinic	30,007	12,994
No. of new In-patients treated ...	93	42
Total No. of In-patients treated	148	1,629
Aggregate No. of In-patients' (old and new) days of treatment ...	5,964	52

PARTICULARS OF PATHOLOGICAL EXAMINATIONS
MADE AT THE PATHOLOGICAL LABORATORIES
DURING THE YEARS 1939 AND 1940.

YEAR		School of Pathology, Trinity College.	University College.	Royal College of Surgeons.	Total.
1939	...	3,027	1,932	1,678	6,637
1940	...	3,134	1,887	1,606	6,627
		6,161	3,819	3,284	13,264

MIDWIVES (IRELAND) ACT, 1918.

During the period, 465 midwives gave the required notice of their intention to practise within the area of the Local Supervising Authority.

In conformity with the Rules of the Central Midwives Board, the midwives were visited at intervals throughout the period at their own homes. Special attention was given to personal cleanliness of the midwives and the condition of their homes and the necessary appliances, bag, contents, etc. The registers containing the entries of births attended by midwives were examined and were with very few exceptions found to be correctly kept.

No midwife was reported for any breach of the Rules and Regulations in the period.

No unregistered woman was found practising without medical assistance.

INSPECTION OF MIDWIVES.

The total number of inspections made during the 2 years was 1,642.

MIDWIVES EMERGENCIES.

During the period 510 claims were made by medical practitioners in the city for attendance on emergencies of labour under the Midwives (Ireland) Act, 1918. The ability of the patient to pay the whole or any part of the fee was investigated.

REGISTRATION OF MATERNITY HOMES ACT, 1934.

There were 50 Maternity Homes on the Register at 31st December, 1940 ; and 822 inspections of Homes were made during the period under review.

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